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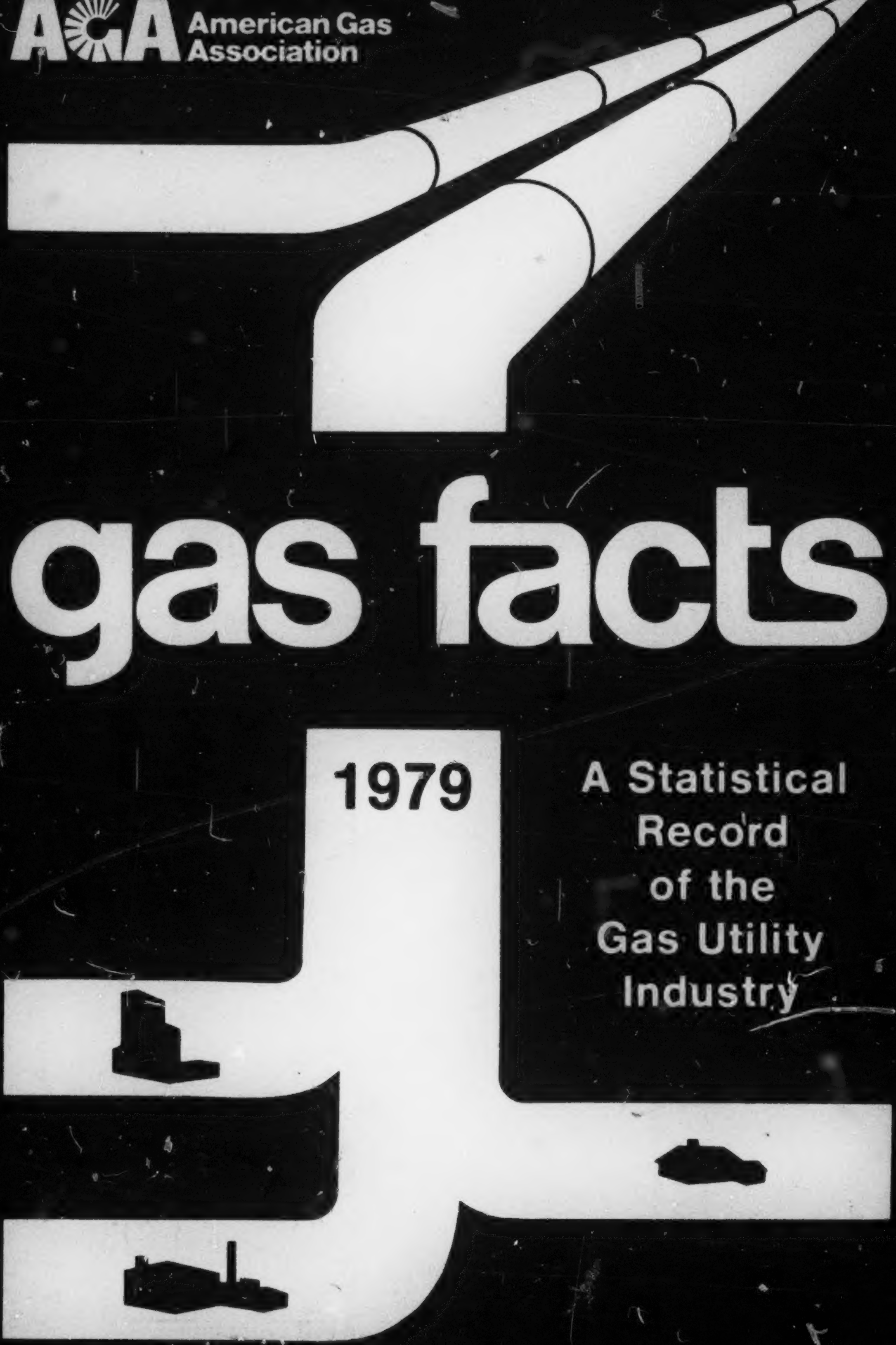

gas facts

1979

A Statistical
Record
of the
Gas Utility
Industry

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Department of Statistics

gas facts

1979 DATA

■ ENERGY RESERVES ■ NATURAL GAS SUPPLY
■ UNDERGROUND STORAGE
■ TRANSMISSION AND DISTRIBUTION
■ ENERGY CONSUMPTION
■ CUSTOMERS ■ SALES ■ REVENUES
■ PRICES ■ APPLIANCE AND HOUSING DATA
■ FINANCE ■ PERSONNEL DATA

■ GLOSSARY ■ INDEX

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GAS FACTS
1979 DATA

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AMERICAN GAS ASSOCIATION

The American Gas Association assumed its present status as the gas utility industry trade association in 1927, after a merger of two predecessor organizations. It renders assistance to the gas utility industry so that the industry may serve its customers more efficiently. Dependence is placed upon the voluntary cooperation of gas companies and established committees composed of representatives from these companies.

The Association recognizes the need for factual information regarding the gas industry for the use, not only of industry organizations, but also interested outside publics. Its statistical efforts are a vital part of this function, and the publication of *Gas Facts* is one result of these efforts. The statistical activities of A.G.A. are performed by the Department of Statistics with guidance provided by the Statistics and Related Economics Committee.

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INTRODUCTION

GENERAL

This publication contains detailed statistics for 1979 and summary statistics for 1955–1978 for the gas utility industry which by definition, consists of the companies engaged in natural gas transmission and distribution. The publication also contains relevant data on the gas producing segment of the industry and key statistics on other energy industries.

Production data of the gas industry, and pertinent other energy industry data are also included. Gas volumes are expressed in millions of cubic feet and in British thermal units (Btu) to permit direct comparison with other energy data. A conversion table is included as Appendix B.

Appendix C contains a sample listing of gas utility companies according to their classification as distribution, transmission, integrated, or in some cases, combination companies. These classifications are defined in the glossary, Appendix A.

SOURCES OF INFORMATION

Most of the statistical information contained in this volume is developed from data contained in the "Uniform Statistical Report," a detailed information form prepared annually both by electric and gas utility companies. Information is also derived from reports filed with regulatory commissions, from financial publications, and from statistical reports prepared by government and private agencies. For 1979, the gas utility companies participating in the Uniform Statistical Report survey represented 95 percent of total gas utility industry sales. Data for non-reporting companies, whose sales represent the remaining 5 percent, were estimated based on recent historical experience.

Employee accident data were taken from A.G.A.'s "Disabling Injury Experience of the Gas Utility Industry" report. Estimates of proved reserves of natural gas, natural gas liquids and petroleum, as well as related production estimates, were taken from "Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada as of December 31, 1979," a joint publication of A.G.A., A.P.I. and the Canadian Petroleum Association. Statistics on underground storage operations were developed by the A.G.A. Committee on Underground Storage. Data for gas spaceheating customers were taken from A.G.A.'s "Gas Househeating Survey." Data on new security issues, as well as related cost and yield data, were derived from various financial publications, supplemented by data provided in the Uniform Statistical Report.

ACKNOWLEDGEMENTS

Our thanks go to those companies participating in the Uniform Statistical Report information gathering effort. Their cooperation and support are the essential elements which have made this publication a primary source of gas utility industry data, and an important industry reference. The cooperation of the public and governmental agencies credited in tables is also greatly appreciated.

Credit also goes to the Energy Statisticians of the Statistics Department—Aileen Bohn, Forest Schmeling, Deborah Slenker, and Kim Howard. Also contributing to the effort were Tim Wood and Annette Flemming of the Computer Services Department; Bob Kalisch—Director, Gas Supply and Statistics; and Karen Forcey—Manager, Statistics.

SECTION I
1979 IN REVIEW

Statistics for 1979 show a continued improvement on the supply side and increased sales on the demand side.

Although the lower 48 proved reserves of natural gas continued to decline, the additions to reserves hit a twelve-year high of 13.7 trillion cubic feet (Tcf). The total additions to reserves in 1979 were 14.3 Tcf, an increase of 35 percent over the 10.6 Tcf additions in 1978. Another important increase occurred in the production of natural gas, a 19.9 Tcf increase, reversing a downward trend since 1973. Furthermore, 1979 also witnessed new record levels of gas well drilling—an indicator of further supply-side improvements.

Transmission and distribution facilities increased in 1979 to 1,030 thousand miles of pipeline. This factor, combined with increases in storage capacity (ultimate capacity for natural gas storage now stands at 7.4 Tcf), has resulted in substantial improvements in gas utility industry deliverability. In 1979, industry achieved a maximum day sendout of 83.8 trillion Btu—a delivery capability which will facilitate industry's ability to serve an ever-changing mix of customers.

Gas utility industry sales increased in 1979, almost 5 percent, to 15,440.3 trillion Btu. This increase was almost entirely due to the industrial sector which experienced a 10.4 percent increase. In turn, the industrial sector was influenced by high electric generation sales which registered a 19.2 percent increase in 1979 over 1978.

Natural gas prices to end-users rose 15.6 percent in 1979 to $2.52 per million Btu, while wellhead and city gate prices increased 26.0 and 23.6 percent, respectively. Despite these increases, natural gas on an average is still considerably less expensive than Number 2 fuel oil or electricity. Increased prices and increased sales combined to raise annual industry revenues to $38.9 billion in 1979, an increase of about 21 percent over 1978.

GAS FACTS

TABLE 1

Comparison of Gas Utility Industry Customers, Sales, and Revenues By Class of Service, 1979 and 1978

(SALES QUANTITIES IN BILLIONS OF BTU, REVENUES IN THOUSANDS OF DOLLARS)

	1979	1978	PERCENTAGE CHANGE
CUSTOMERS—TOTAL*	**46,478,300**	**45,788,800**	**+ 1.5**
RESIDENTIAL	42,821,300	42,183,200	+ 1.5
COMMERCIAL	3,422,800	3,369,800	+ 1.6
INDUSTRIAL	189,400	189,200	+ 0.1
OTHER	44,800	46,700	− 4.1
SALES—TOTAL	**15,440,300**	**14,748,400**	**+ 4.7**
RESIDENTIAL	5,083,100	5,106,700	− 0.5
COMMERCIAL	2,485,800	2,499,500	− 0.6
INDUSTRIAL	7,555,000	6,841,200	+ 10.4
OTHER	316,400	301,000	+ 5.1
REVENUES—TOTAL	**38,947,143**	**32,149,922**	**+ 21.1**
RESIDENTIAL	14,832,950	12,938,865	+ 14.6
COMMERCIAL	6,623,766	5,695,666	+ 16.3
INDUSTRIAL	16,960,870	13,064,676	+ 29.8
OTHER	529,557	450,714	+ 17.5

*YEARLY AVERAGES

SECTION II
ENERGY RESERVES

	Reserves as of December 31	
	1979	% Change 79/78
Natural Gas		
(Millions of cubic feet)		
Total	194,916,624	– 2.7
Non-Associated	134,189,882	– 3.5
Associated-Dissolved	55,838,660	– 1.5
Underground Storage	4,888,082	+ 5.2
New Additions	14,285,947	+35.0
Natural Gas Liquids		
(Thousands of barrels)		
Total	5,655,323	– 4.6
Non-Associated	3,558,342	– 4.5
Associated-Dissolved	2,096,981	– 4.7
New Additions	389,805	–34.6
Crude Oil		
(Thousands of barrels)		
Total	27,051,289	– 2.7
New Additions	2,205,673	+63.7

TABLE 2
SUMMARY OF ANNUAL ESTIMATES OF PROVED RESERVES OF NATURAL GAS IN THE UNITED STATES, 1955-1979[a]

(Millions of cubic feet)

	Changes in Reserves during year									
Year	Extensions	Extensions and Revisions	Revisions	New Field Discoveries	Discoveries of New Fields and New Pools in Old Fields	New Reservoir Discoveries	Total of Discoveries, Revisions and Extensions	Net Change in Underground Storage	Preliminary Net Production during Year[c]	Estimated Proved Reserves as of End of Year	Change over Previous Year
1955	—	16,209,607	—	—	5,688,009	—	21,897,616	87,164	10,063,167	222,482,544	11,921,613
1956	—	19,110,251	—	—	5,605,864	—	24,716,115	133,241	10,848,685	236,483,215	14,000,671
1957	—	11,057,932	—	—	8,950,119	—	20,008,051	178,761	11,439,890	245,230,137	8,746,922
1958	—	13,316,100	—	—	5,580,624	—	18,896,724	57,582	11,422,651	252,761,792	7,531,655
1959	—	14,852,004	—	—	5,769,245	—	20,621,249	160,453	12,373,036	261,170,431	8,408,639
1960	—	7,293,015	—	—	6,600,963	—	13,893,978	281,273	13,019,356	262,326,326	1,155,895
1961	—	10,258,692	—	—	6,907,729	—	17,166,421	159,544	13,378,649	266,273,642	3,947,316
1962	—	13,184,794	—	—	6,299,164	—	19,483,958	159,231	13,637,973	272,278,858	6,005,216
1963	—	12,586,733	—	—	5,577,934	—	18,164,667	253,733	14,546,025	276,151,233	3,872,375
1964	—	13,342,838	—	—	6,909,301	—	20,252,139	195,110	15,347,028	281,251,454	5,100,221
1965	—	14,775,570	—	—	6,543,709	—	21,319,279	150,483	16,252,293	286,468,923	5,217,469
1966	9,224,745	—	4,937,962	2,947,329	—	3,110,396	20,220,432	134,523	17,491,073	289,332,805	2,863,882
1967	9,538,584	—	6,570,578	3,170,520	—	2,524,651	21,804,333	151,403	18,380,838	292,907,703	3,574,898
1968	7,758,821	—	3,016,146	1,376,429	—	1,545,612	13,697,008	118,569	19,373,428	287,349,852	(5,557,851)
1969	5,800,489	—	(1,238,261)	1,769,557	—	2,043,219	8,375,004	107,169	20,723,190	275,108,835	(12,241,017)
1970	6,158,168	—	(99,721)	27,770,223[b]	—	3,367,689	37,196,359	402,018	21,960,804	290,746,408	15,637,573
1971	6,374,706	—	(1,227,400)	1,317,574	—	3,360,541	9,825,421	310,301	22,076,512	278,805,618	(11,940,790)
1972	6,153,683	—	(1,077,791)	1,462,539	—	3,096,132	9,634,563	156,563	22,511,898	266,084,846	(12,720,772)
1973	6,177,286	—	(3,474,756)	2,152,151	—	1,970,368	6,825,049	(354,282)	22,605,406	249,950,207	(16,134,639)
1974	5,847,251	—	(1,333,285)	2,013,745	—	2,151,473	8,679,184	(178,424)	21,318,470	237,132,497	(12,817,710)
1975	6,027,433	—	383,449	2,423,382	—	1,649,424	10,483,688	302,561	19,718,570	228,200,176	(8,932,321)
1976	5,337,707	—	(1,197,119)	1,421,013	—	1,993,867	7,555,468	(187,550)	19,542,020	216,026,074	(12,174,102)
1977	6,601,229	—	983,551	2,114,505	—	2,152,639	11,851,924	446,930	19,447,050	208,877,878	(7,148,196)
1978	6,733,441	—	118,436	1,719,938	—	2,014,329	10,586,144	148,733	19,311,048	200,301,707	(8,576,171)
1979	7,113,113	—	2,907,551	2,575,779	—	1,689,504	14,285,947	239,323	19,910,353	194,916,624	(5,385,083)

a. Volumes are calculated at a pressure base of 14.73 psi, absolute, and at a standard temperature of 60°F.

b. Includes the estimates of proved reserves in the Prudhoe Bay Permo-triassic reservoir discovered in 1968 and not previously included.

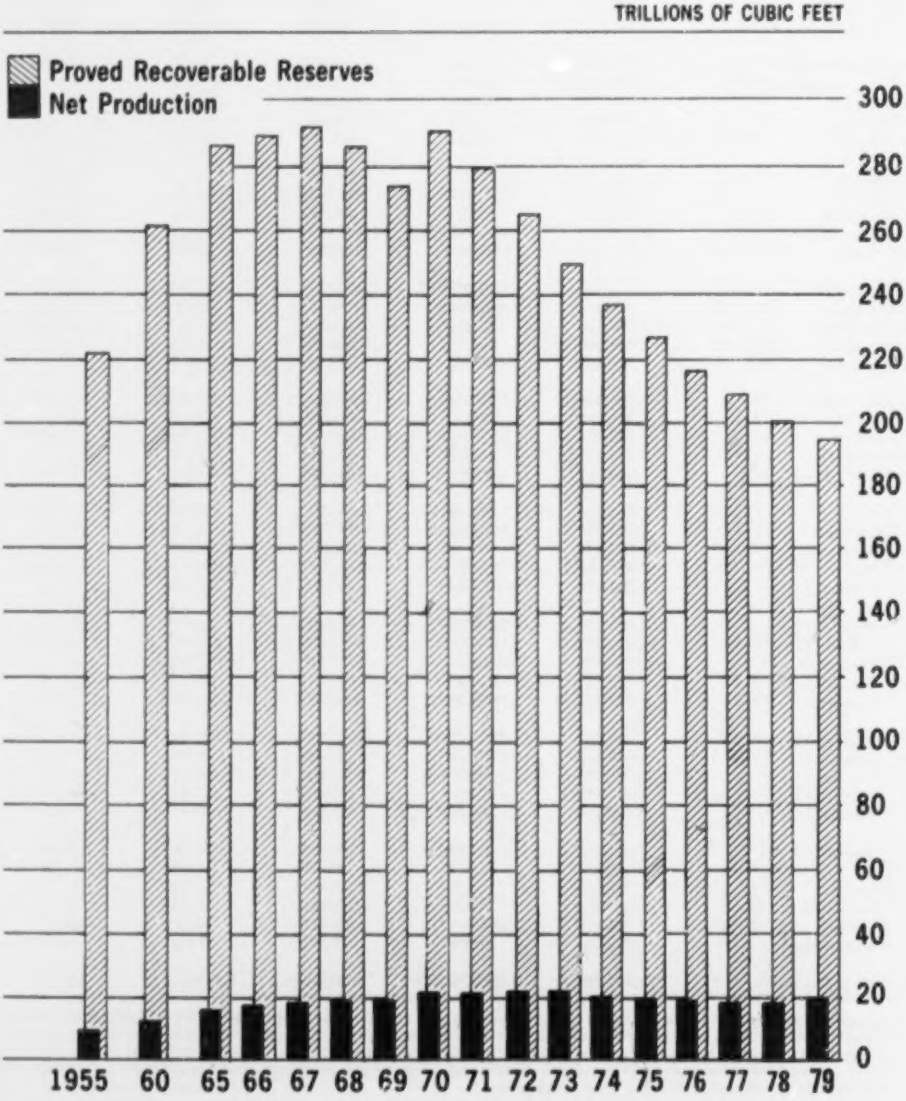
c. "Preliminary Net Production" equals estimated gross withdrawals less (1) gas reinjected into producing reservoirs for cycling and pressure maintenance, and (2) natural gas liquids. "Preliminary Net Production" differs from U.S. Bureau of Mines "Marketed Production" in that (1) the sources from which they are derived are different, and (2) "Marketed Production" includes natural gas liquids.

( ): Denotes negative volume.

Source: A.G.A., American Petroleum Institute and Canadian Petroleum Association. *Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada as of December 31, 1979.*

CHART 2

PROVED RECOVERABLE RESERVES & NET PRODUCTION OF NATURAL GAS IN THE UNITED STATES



REFERENCE: TABLES 2 & 3

TABLE 3

CHANGES IN ESTIMATED PROVED RESERVES OF NATURAL GAS, IN THE UNITED STATES BY STATE, DURING 1979[a]

(Millions of cubic feet)

State	Reserves as of December 31, 1978	Changes in Reserves During 1979			
		Revisions	Extensions	New Field Discoveries	New Reservoir Discoveries
(1) Total United States	**200,301,707**	**2,907,551**	**7,113,113**	**2,575,779**	**1,689,504**
(2) Alabama	751,219	(1,060)	85,116	156,691	896
(3) Alaska	31,612,295	502,434	1,000	50,000	0
(4) Arkansas	1,627,064	67,495	57,161	4,976	4,700
(5) California[d]	5,095,082	129,162	54,108	5,413	68,647
(6) San Joaquin Basin	3,945,963	105,024	50,880	2,600	28,647
(7) Coastal Region[d]	848,070	40,932	2,666	2,813	40,000
(8) Los Angeles Basin[d]	301,049	(16,794)	562	0	0
(9) Colorado	1,965,765	6,640	233,511	22,163	2,601
(10) Florida	160,296	(648)	0	0	0
(11) Illinois	420,437	3,556	0	3,614	0
(12) Indiana	56,710	12	0	0	0
(13) Kansas	12,287,341	752,053	231,363	22,826	8,822
(14) Kentucky	718,929	(331)	26,597	2,116	1,540
(15) Louisiana[d,e]	49,674,148	(77,279)	1,439,423	911,112	834,623
(16) North	2,379,165	100,060	173,788	15,630	38,991
(17) South[d,e]	47,294,983	(177,339)	1,265,635	895,482	795,632
(18) Michigan	1,768,581	101,536	0	29,437	0
(19) Mississippi	1,410,514	(1,700)	134,131	33,302	19,707
(20) Montana	991,668	42,250	50,699	4,074	1,915
(21) Nebraska	72,839	2,293	654	5,000	0
(22) New Mexico	13,261,489	359,531	893,821	44,642	22,349
(23) North	9,646,466	32,086	720,282	7,739	0
(24) South	3,615,023	327,445	173,539	36,903	22,349
(25) New York	262,711	100	22,800	4,100	0
(26) North Dakota	411,485	52,063	31,285	13,071	19,538
(27) Ohio	1,560,478	0	255,397	2,760	2,330
(28) Oklahoma	11,463,291	542,058	782,152	33,647	24,976
(29) Pennsylvania	2,093,516	0	198,075	4,800	0
(30) Texas[a]	54,600,235	156,784	1,880,850	1,120,074	654,154
(31) District 1	1,067,071	22,228	46,734	10,669	9,561
(32) District 2[d]	4,326,275	120,337	27,591	49,895	81,826
(33) District 3[d]	13,273,295	(197,917)	191,870	551,043	41,100
(34) District 4[d]	10,527,441	(624,538)	132,938	142,846	385,212
(35) District 5	692,917	25,043	91,587	14,284	4,561
(36) District 6	4,302,223	(110,121)	466,529	274,598	81,279
(37) District 7B	860,879	(25,438)	309,539	19,561	19,316
(38) District 7C	1,679,012	152,228	16,102	6,572	229
(39) District 8	8,294,307	417,743	172,471	20,955	11,367
(40) District 8A	1,075,564	137,369	20,187	262	175
(41) District 9	990,496	27,942	21,337	6,782	3,948
(42) District 10	7,510,755	211,908	383,965	22,607	15,580
(43) Utah	698,655	6,764	7,657	9,996	581
(44) Virginia	79,064	0	4,200	1,200	0
(45) West Virginia	2,683,136	(199)	300,653	3,150	15,075
(46) Wyoming	4,315,775	263,725	414,160	74,915	6,550
(47) Miscellaneous[f]	258,984	312	8,300	12,700	500
(48) Gulf of Mexico[g]	35,635,006	1,452,375	921,530	1,292,804	595,970

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a. Volumes are calculated at a pressure base 14.73 psi, absolute, and at a standard temperature of 60 °F. Reserves of dissolved gas were estimated jointly with the A.P.I. Committee on Petroleum Reserves. As such, "Net Production" differs from the U.S. Bureau of Mines "Marketed Production," which includes natural gas liquids.

b. The net difference between gas stored in and gas withdrawn from underground storage reservoirs, inclusive of adjustments and native gas transferred from other reserve categories.

c. Gas held in underground reservoirs (including native and net injected gas) for storage purposes.

ENERGY RESERVES

TABLE 3 (Continued)
CHANGES IN ESTIMATED PROVED RESERVES OF NATURAL GAS, IN THE UNITED STATES BY STATE, DURING 1979[a]

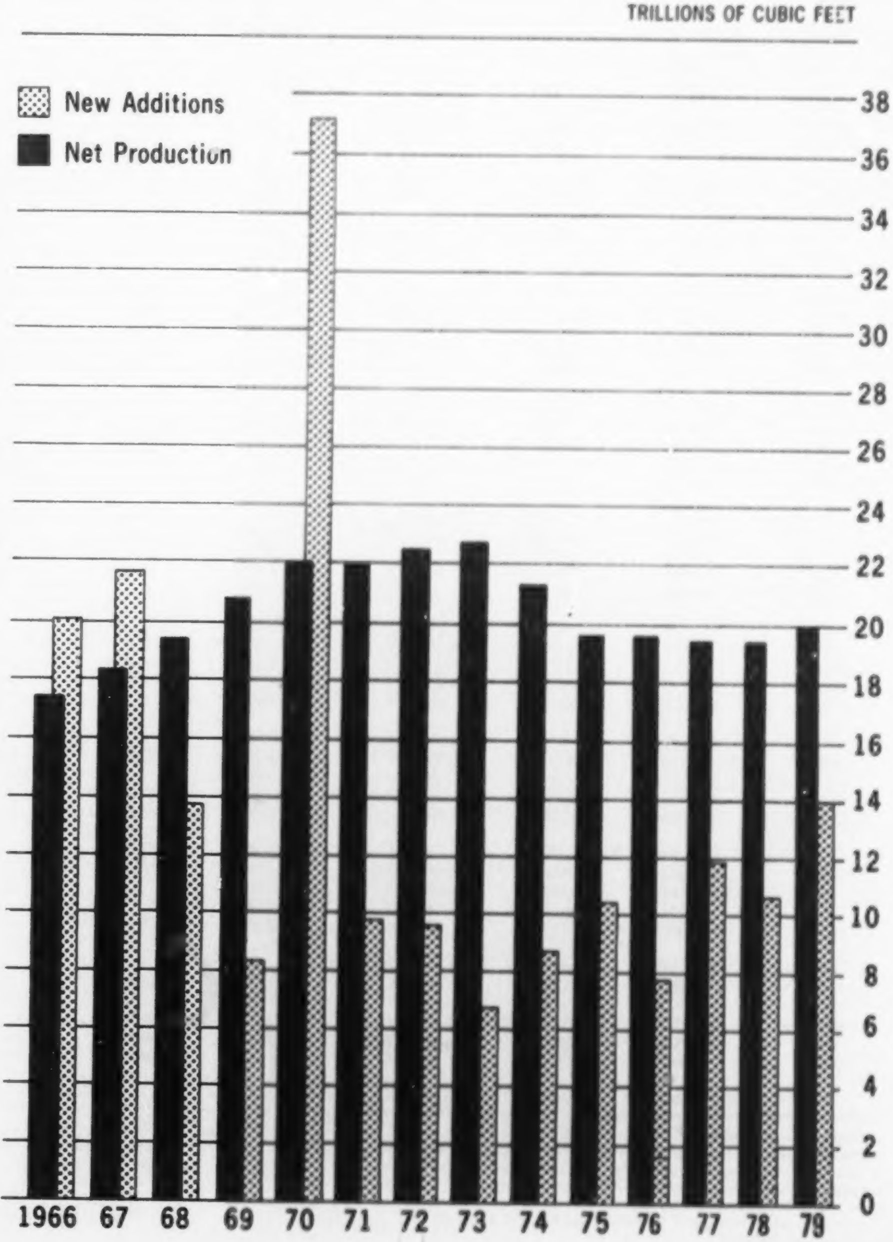
(Millions of cubic feet)

Changes in Reserves During 1979		Reserves as of December 31, 1979				
Net Change in Underground Storage[b]	Preliminary Net Production	Total	Non-associated	Associated-Dissolved	Underground Storage[c]	
239,323	**19,910,353**	**194,916,624**	**134,189,882**	**55,838,660**	**4,888,082**	**(1)**
0	59,710	933,152	911,142	22,010	0	(2)
0	225,281	31,940,448	5,230,173	26,710,275	0	(3)
(611)	130,221	1,630,564	1,405,172	200,483	24,909	(4)
22,431	330,378	5,044,465	1,862,249	2,785,989	396,227	(5)
7,203	260,710	3,879,607	1,745,456	2,000,522	133,629	(6)
13,537	44,822	903,196	116,047	568,562	218,587	(7)
1,691	24,846	261,662	746	216,905	44,011	(8)
3,264	190,863	2,043,081	1,826,831	177,496	38,754	(9)
0	51,019	108,629	0	108,629	0	(10)
45,302	1,718	471,191	4,452	4,848	461,891	(11)
(4,122)	151	52,449	929	13	51,507	(12)
4,719	791,351	12,515,773	12,257,228	142,080	116,465	(13)
5,833	55,721	698,963	516,466	40,934	141,563	(14)
(4,028)	7,223,674	45,554,325	38,441,924	6,795,814	316,587	(15)
3,736	329,346	2,382,024	1,363,422	800,631	217,971	(16)
(7,764)	6,894,328	43,172,301	37,078,502	5,995,183	98,616	(17)
61,485	163,116	1,797,923	605,819	531,784	660,320	(18)
(7,003)	159,591	1,429,360	1,276,854	68,239	84,267	(19)
7,757	62,272	1,036,091	807,645	63,483	164,963	(20)
6,993	2,777	85,002	10,680	12,696	61,626	(21)
(7,648)	1,113,446	13,460,738	11,218,049	2,222,349	20,340	(22)
(99)	558,071	9,848,403	9,790,867	52,468	5,068	(23)
(7,549)	555,375	3,612,335	1,427,182	2,169,881	15,272	(24)
7,357	14,548	282,520	162,494	171	119,855	(25)
0	38,095	489,347	45,537	443,810	0	(26)
12,782	124,665	1,709,082	1,170,455	142,878	395,749	(27)
4,452	1,659,568	11,191,008	8,789,474	2,139,212	262,322	(28)
51,234	96,313	2,251,312	1,606,669	11,149	633,494	(29)
11,469	6,812,795	51,610,771	39,454,582	11,892,171	264,018	(30)
0	110,017	1,046,246	806,737	239,509	0	(31)
(453)	423,974	4,181,497	2,835,284	1,346,213	0	(32)
(14,336)	1,731,969	12,113,086	10,089,855	1,942,477	80,754	(33)
0	1,232,227	9,331,672	7,390,729	1,940,943	0	(34)
(3,776)	114,959	709,657	595,922	83,421	30,314	(35)
28,502	350,111	4,692,899	3,544,658	1,037,619	110,622	(36)
171	148,599	1,035,429	695,563	314,845	25,021	(37)
(13)	289,633	1,564,497	1,047,757	515,072	1,668	(38)
0	1,148,444	7,768,399	4,877,902	2,890,497	0	(39)
0	143,134	1,090,423	81,349	1,009,074	0	(40)
1,559	119,945	932,119	648,615	267,865	15,639	(41)
(185)	999,783	7,144,847	6,840,211	304,636	0	(42)
227	46,801	677,079	397,233	277,521	2,325	(43)
0	8,597	75,867	75,867	0	0	(44)
18,831	153,096	2,867,550	2,420,492	46,362	400,696	(45)
2,670	392,304	4,685,491	3,634,622	995,265	55,604	(46)
(4,071)	2,282	274,443	56,844	2,999	214,600	(47)
0	5,487,943	34,409,742	30,215,124	4,194,618	0	(48)

d. Includes offshore reserves
e. Reported quantities include reserves estimated to be recoverable from some reservoirs considered natural gas bearing based on electrical logs, core data and other available engineering and geological data.
f. Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
g. Included in Texas and Louisiana.
( ): Denotes negative volume.
Source: Same as Table 2.

CHART 3

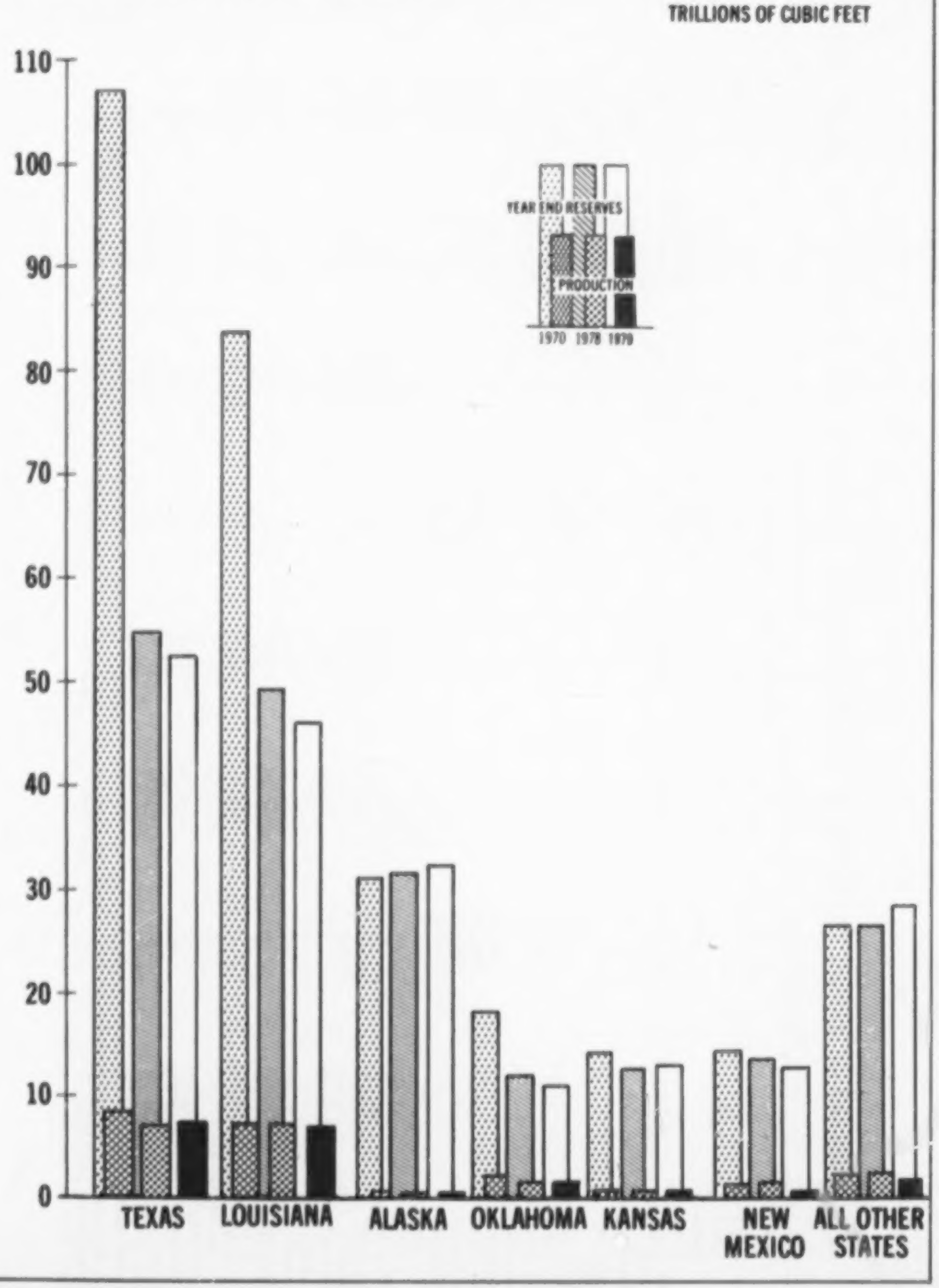
NET PRODUCTION AND NEW ADDITIONS TO GAS RESERVES



REFERENCE: TABLE 2

CHART 4

NATURAL GAS STATE RESERVES AND PRODUCTION FOR 1970, 1978 and 1979



REFERENCE: TABLE 3

TABLE 4

SUMMARY OF ANNUAL ESTIMATES OF PROVED RESERVES OF NATURAL GAS LIQUIDS IN THE UNITED STATES, 1955-1979*

(Thousands of barrels)

	Natural Gas Liquids added during year									
Year	Extensions	Extensions and Revisions	Revisions	New Field Discoveries	Discoveries of New Fields and New Pools in Old Fields	New Reservoir Discoveries	Total of Discoveries Revisions and Extensions	Preliminary Net Production during Year	Estimated Proved Reserves as of End of Year	Change over Previous Year
1955	—	447,160	—	—	67,348	—	514,508	320,400	5,438,565	194,108
1956	—	715,764	—	—	94,056	—	809,820	346,053	5,902,332	463,767
1957	—	8,884	—	—	128,508	—	137,392	352,364	5,687,360	(214,972)
1958	—	749,956	—	—	108,250	—	858,206	341,548	6,204,018	516,658
1959	—	593,905	—	—	109,539	—	703,444	385,154	6,522,308	318,290
1960	—	603,621	—	—	121,509	—	725,130	431,379	6,816,059	293,751
1961	—	590,537	—	—	104,149	—	694,686	461,649	7,049,096	233,037
1962	—	580,570	—	—	151,979	—	732,549	470,128	7,311,517	262,421
1963	—	700,183	—	—	177,937	—	878,120	515,659	7,673,978	362,461
1964	—	457,702	—	—	151,042	—	608,744	536,090	7,746,632	72,654
1965	—	721,605	—	—	110,707	—	832,312	555,410	8,023,534	276,902
1966	131,583	—	634,233	53,378	—	74,922	894,116	588,684	8,328,966	305,432
1967	159,725	—	671,112	57,272	—	41,649	929,758	644,493	8,614,231	685,265
1968	155,940	—	469,689	26,642	—	33,388	685,659	701,782	8,598,108	(16,123)
1969	106,815	—	106,192	26,831	—	41,190	281,028	735,962	8,143,174	(454,934)
1970	103,740	—	35,446	34,234	—	134,159	307,579	747,812	7,702,941	(440,233)
1971	93,909	—	135,144	28,513	—	90,154	347,720	746,434	7,304,227	(398,714)
1972	112,537	—	38,796	32,652	—	54,288	238,273	755,941	6,786,559	(517,668)
1973	121,835	—	231,460	19,202	—	36,482	408,979	740,831	6,454,707	(331,852)
1974	149,996	—	393,484	36,095	—	40,266	619,841	724,099	6,350,449	(104,258)
1975	116,810	—	345,496	128,036	—	28,162	618,504	701,123	6,267,830	(82,619)
1976	158,572	—	614,356	20,460	—	41,378	834,766	700,629	6,401,967	134,137
1977	152,535	—	78,043	24,950	—	35,643	291,171	698,773	5,994,365	(407,602)
1978	153,181	—	365,813	31,427	—	45,245	595,666	664,179	5,925,852	(68,513)
1979	166,769	—	141,727	38,437	—	42,872	389,805	660,334	5,655,323	(270,529)

*Includes condensate, natural gasoline and liquefied petroleum gases.
( ): Denotes negative volume.
Source: Same as Table 2.

CHANGES IN ESTIMATED PROVED RECOVERABLE RESERVES OF NATURAL GAS LIQUIDS, IN THE UNITED STATES BY STATE, DURING 1979[a]

(Thousands of barrels)

Division and State	Reserves as of December 31, 1978	Changes in Reserves during 1979					Reserves as of December 31, 1979		
		Revisions	Extensions	New Field Discoveries	New Reservoir Discoveries	Preliminary Net Production	Total	Non-Associated	Associated-Dissolved
United States	5,925,852	141,727	166,769	38,437	42,872	660,334	5,655,323	3,558,342	2,096,981
Alabama	204,065	217	4,993	319	0	11,689	197,905	196,251	1,654
Alaska	407,791	3	0	0	0	635	407,159	0	407,159
Arkansas	5,361	7,973	545	63	86	1,188	12,840	830	12,010
California[b]	102,321	(4,813)	927	147	82	9,311	89,396	1,371	88,025
San Joaquin Basin	79,612	(4,546)	793	0	82	6,504	69,437	744	68,693
Coastal Region[b]	12,272	(692)	139	147	0	1,668	10,198	627	9,571
L.A. Basin[b]	10,437	425	38	0	0	1,139	9,761	0	9,761
Colorado	61,199	1,257	634	1,047	0	8,689	55,448	40,328	15,120
Florida	21,490	4,997	0	0	0	8,795	17,692	0	17,692
Illinois	0	0	0	0	0	0	0	0	0
Indiana	0	0	0	0	0	0	0	0	0
Kansas	463,761	25,982	9,213	916	343	29,992	470,223	461,852	8,371
Kentucky	39,253	0	2,089	120	87	3,530	38,019	38,019	0
Louisiana[b,c]	1,315,545	(23,944)	47,252	13,472	26,065	192,358	1,186,032	1,045,267	140,765
North	52,521	6,518	5,874	156	390	12,558	52,901	34,259	18,642
South[b,c]	1,263,024	(30,462)	41,378	13,316	25,675	179,800	1,133,131	1,011,008	122,123
Michigan	65,693	13,587	0	2,278	0	10,032	71,526	28,245	43,281
Mississippi	12,707	1,064	266	301	51	2,385	12,004	10,660	1,344
Montana	3,299	0	0	0	0	380	2,919	2,329	590
Nebraska	457	160	0	0	0	116	501	163	338
New Mexico	451,672	25,591	298	2	0	38,314	439,249	320,219	119,030
Northwest	291,736	14,718	0	0	0	16,366	290,088	290,088	0
South	159,936	10,873	298	2	0	21,948	149,161	30,131	119,030
North Dakota	54,126	(32)	900	500	65	1,804	53,755	1,465	52,290
Ohio	0	0	0	0	0	0	0	0	0
Oklahoma	268,670	31,343	19,284	837	528	45,140	275,522	184,100	91,422
Pennsylvania	323	0	0	0	0	57	266	266	0
Texas[b]	2,268,284	53,624	64,643	17,850	15,565	280,215	2,139,751	1,089,768	1,049,983
District 1	26,253	4,252	1,092	252	224	3,386	28,687	20,986	7,701
District 2	92,660	715	491	901	1,496	9,128	87,135	53,528	33,607
District 3[b]	263,521	7,170	2,492	6,400	685	37,918	242,350	150,038	92,312
District 4[b]	322,273	(34,866)	3,737	4,015	10,918	33,890	272,187	217,692	54,495
District 5	64,315	(2,090)	513	418	4	3,371	59,789	52,636	7,153
District 6	310,184	2,096	9,973	3,124	489	25,713	300,153	113,839	186,314
District 7B	69,960	(3,226)	17,001	1,040	541	12,635	72,681	7,804	64,877
District 7C	91,594	3,000	933	0	0	16,204	79,323	31,683	47,640
District 8	433,259	8,407	6,923	109	28	49,390	399,336	126,644	272,692
District 8A	222,513	32,833	961	12	24	33,681	222,662	539	222,123
District 9	58,038	3,462	2,518	555	397	8,434	56,534	19,034	37,500
District 10	313,714	31,871	18,011	1,024	759	46,465	318,914	295,345	23,569
Utah	31,714	(949)	0	0	0	2,573	28,192	578	27,614
West Virginia	96,279	0	12,413	0	0	4,904	103,788	103,788	0
Wyoming	51,842	5,667	3,269	585	0	8,227	53,136	32,843	20,293
Gulf of Mexico[d]	693,217	11,047	19,103	13,602	16,234	89,293	663,910	583,649	80,261

a. Includes condensate, natural gasoline and liquefied petroleum gases.

b. Includes offshore reserves.

c. Reported quantities include reserves estimated to be recoverable from some reservoirs considered natural gas bearing based on electrical logs, core data and other available engineering and geological data.

d. Included in Texas and Louisiana.

( ): Denotes negative volume.

Source: Same as Table 2.

TABLE 6
SUMMARY OF ESTIMATED PROVED RESERVES OF CRUDE OIL IN THE UNITED STATES, 1955-1979

(Thousands of barrels)

Year	New Oil Added During Year			Production during Year	Estimated Proved Reserves as of End of Year	Change over Previous Year
	Through Revisions of Previous Estimates and Extensions to Known Fields	Through New Pools Discovered during Year	Total through New Discoveries, Extensions, and Revisions			
1955	2,393,767	476,957	2,870,724	2,419,300	30,012,170	451,424
1956	2,507,114	467,222	2,974,336	2,551,857	30,434,649	422,479
1957	2,008,603	416,197	2,424,800	2,559,044	30,300,405	(134,244)
1958	2,293,513	314,729	2,608,242	2,372,730	30,535,917	235,512
1959	3,297,383	369,362	3,666,745	2,483,315	31,719,347	1,183,430
1960	2,111,472	253,856	2,365,328	2,471,464	31,613,211	(106,136)
1961	2,296,193	361,374	2,657,567	2,512,273	31,758,505	145,294
1962	1,800,310	380,586	2,180,896	2,550,178	31,389,223	(369,282)
1963	1,824,219	349,891	2,174,110	2,593,343	30,969,990	(419,233)
1964	2,318,474	346,293	2,664,767	2,644,247	30,990,510	20,520
1965	2,576,132	471,947	3,048,079	2,686,198	31,352,391	361,881
1966	2,653,556	310,422	2,963,978	2,864,242	31,452,127	99,736
1967	2,617,436	344,686	2,962,122	3,037,579	31,376,670	(75,457)
1968	2,096,889	357,746	2,454,635	3,124,188	30,707,117	(669,553)
1969	1,872,852	247,184	2,120,036	3,195,291	29,631,862	(1,075,255)
1970	2,720,281	9,968,627*	12,688,918	3,319,445	39,001,335	9,369,473
1971	2,161,022	156,710	2,317,732	3,256,110	38,062,957	(938,378)
1972	1,279,418	278,430	1,557,848	3,281,397	36,339,408	(1,723,549)
1973	1,941,918	203,913	2,145,831	3,185,400	35,299,839	(1,039,569)
1974	1,679,847	313,726	1,993,573	3,043,456	34,249,956	(1,049,883)
1975	1,017,399	301,064	1,318,463	2,886,292	32,682,127	(1,567,829)
1976	954,938	130,353	1,085,291	2,825,252	30,942,166	(1,739,961)
1977	1,134,685	269,095	1,403,780	2,859,544	29,486,402	(1,455,764)
1978	1,073,779	273,477	1,347,256	3,029,898	27,803,760	(1,682,642)
1979	1,858,700	346,973	2,205,673	2,958,144	27,051,289	(752,471)

*Includes the estimates of proved reserves in the Prudhoe Bay Permo-triassic reservoir discovered in 1968 and not previously included.
( ): Denotes negative volume.
Source: Same as Table 2.

ENERGY RESERVES

Table 7

CHANGES IN ESTIMATED PROVED RESERVES OF CRUDE OIL, IN THE UNITED STATES BY STATE, DURING 1979

(Thousands of barrels)

State	Reserves as of December 31, 1978	Changes in Reserves during 1979					Reserves as of December 31, 1979
		Revisions	Extensions	New Fields Discovered	New Pools Discovered	Estimated Production	
United States	**27,803,760**	**1,490,618**	**368,082**	**239,406**	**107,567**	**2,958,144**	**27,051,289**
Alabama	33,107	5,507	—	50	—	10,322	28,342
Alaska	9,247,356	187,946	—	—	—	511,327	8,923,975
Arkansas	94,038	27,515	3,981	—	110	18,414	107,230
California[a]	3,471,301	308,246	16,565	160,400	40,100	351,926	3,644,686
Coastal	601,756	50,014	3,340	10,400	40,000	59,616	645,894
L. A. Basin	879,222	(29,084)	1,100	150,000	—	88,298	912,940
San Joaquin	1,990,323	287,316	12,125	—	100	204,012	2,085,852
Colorado	198,012	(17,323)	1,566	1,267	190	31,652	152,060
Florida	169,361	1,316	—	—	—	47,967	122,710
Illinois	137,927	13,830	643	687	75	20,254	132,908
Indiana	26,515	1,074	945	78	1,616	4,733	25,495
Kansas	350,367	22,731	19,850	4,398	685	53,253	344,778
Kentucky	31,833	4,204	50	120	65	5,533	30,739
Louisiana[a]	2,893,401	(34,542)	56,118	18,388	34,986	413,230	2,555,121
North	208,742	36	1,840	125	—	27,788	182,955
South	2,684,659	(34,578)	54,278	18,263	34,986	385,442	2,372,166
Michigan	190,164	14,016	—	6,714	—	34,589	176,305
Mississippi	187,587	9,539	3,185	3,082	70	34,582	168,881
Montana	140,466	13,261	5,893	4,576	1,510	29,116	136,590
Nebraska	29,291	4,478	1,172	1,067	—	5,891	30,117
New Mexico	485,640	40,911	7,627	477	1,478	74,420	461,713
Northwest	16,826	170	2,100	45	—	3,968	15,173
Southeast	468,814	40,741	5,527	432	1,478	70,472	446,540
New York	8,995	1,500	—	—	—	855	9,641
North Dakota	161,213	16,230	16,671	5,815	4,655	29,389	175,195
Ohio	131,194	—	18,333	18	126	11,953	137,718
Oklahoma	1,073,469	4,570	50,129	3,105	2,500	128,441	1,005,332
Pennsylvania	48,156	5,288	218	—	—	2,816	50,846
South Dakota	2,738	1,010	—	—	—	801	2,947
Tennessee	2,489	(6)	590	146	—	614	2,605
Texas[a]	7,689,991	768,610	119,263	20,959	18,100	980,839	7,636,084
District 1	110,258	4,779	331	104	66	18,595	96,943
District 2	382,189	17,780	487	657	1,373	49,863	352,623
District 3	745,558	3,888	30,885	3,823	3,117	118,086	669,185
District 4	122,586	9,996	1,028	816	4,010	21,216	117,220
District 5	54,323	577	480	611	10	10,909	45,092
District 6	1,512,934	(137,901)	848	316	658	109,628	1,267,227
District 7B	188,922	(7,232)	10,350	2,931	1,809	27,511	169,269
District 7C	166,334	3,043	21,922	1,874	806	28,333	165,646
District 8	2,389,899	103,270	22,086	2,236	1,122	246,212	2,272,401
District 8A	1,694,063	704,884	14,677	2,003	3,290	301,989	2,116,928
District 9	187,714	43,527	8,656	2,807	1,649	32,495	211,858
District 10	135,211	21,999	7,513	2,781	190	16,002	151,692
Utah	155,371	10,827	1,000	3,701	325	26,882	144,342
West Virginia	29,675	302	410	—	—	2,465	27,922
Wyoming	804,567	79,215	43,723	4,357	965	124,062	808,765
Miscellaneous[b]	9,535	363	150	1	11	1,818	8,242
Gulf of Mexico[c]	1,749,464	124,606	45,554	17,335	26,128	255,503	1,707,584

a. Includes offshore reserves.
b. Includes Arizona, Missouri, Nevada, and Virginia.
c. Included in Texas and Louisiana.
( ): Denotes negative volume.
Source: Same as Table 2.

TABLE 8
TOTAL ESTIMATED REMAINING IDENTIFIED RESERVES OF COAL AND LIGNITE BY STATE, AS OF JANUARY 1, 1976[a]

(Billions of short tons)

State	Total Coal and Lignite	Coal			Lignite
		Anthracite and Semianthracite	Subbituminous	Bituminous	
United States	**438.3**	**7.4**	**168.4**	**228.9**	**33.6**
Alabama	3.1			2.0	1.1
Alaska	6.2		5.4	0.7	b
Arizona	0.3			0.3	
Arkansas	0.4	0.1		0.3	b
Colorado	16.3	b	4.1	9.1	3.0
Georgia	b			b	
Idaho	b			b	
Illinois	68.0			68.0	
Indiana	10.7			10.7	
Iowa	2.2			2.2	
Kansas	1.0			1.0	
Kentucky	26.0			26.0	
Maryland	1.0			1.0	
Michigan	0.1			0.1	
Missouri	5.0			5.0	
Montana	120.6		103.4	1.4	15.8
New Mexico	4.6	b	2.7	1.9	
North Carolina	b			b	
North Dakota	10.1				10.1
Ohio	19.2			19.2	
Oklahoma	1.6			1.6	
Oregon	b		b		
Pennsylvania	30.8	7.1		23.7	
South Dakota	0.4				0.4
Tennessee	1.0			1.0	
Texas	3.2				3.2
Utah	6.6		b	6.6	
Virginia	4.3	0.1		4.2	
Washington	1.6		1.3	0.3	b
West Virginia	38.6			38.6	
Wyoming	55.4		51.4	4.0	

a. Figures are for resources in the ground, about half of which may be considered recoverable. Includes beds of bituminous coal and anthracite 28 in. or more thick and beds of subbituminous coal and lignite 5 ft. or more thick.
b. Less than 50 million short tons.
Source: U.S. Department of the Interior, Bureau of Mines, *The Demonstrated Reserve Base of Coals in the United States,* January 1, 1976.

TABLE 9
SUMMARY OF ANNUAL ESTIMATES OF RESERVES OF NATURAL GAS IN CANADA, 1964-1979[a]

(Millions of cubic feet)

	Reserves Remaining at Beginning of Year	Changes Due To						Reserves Remaining at End of Year	Change During Year	Probable Remaining at End of Year[b]
		Revisions	Revisions and Extensions	Extensions	Discoveries	Net Change in Underground Storage	Net Production			
MARKETABLE GAS[c]										
1964	32,992,252	—	—	—	—	—	—	39,319,544	6,327,292	45,572,431
1965	39,319,544	—	—	—	—	—	—	40,354,527	1,034,983	46,434,950
1966	40,354,527	2,158,536	—	1,532,317	512,086	17,918	1,125,289	43,450,095	3,095,568	49,269,076
1967	43,450,095	1,572,424	—	1,268,002	603,459	4,120	1,216,049	45,682,051	2,231,956	50,945,169
1968	45,682,051	230,116	—	2,867,357	282,913	(1,255)	1,394,721	47,666,461	1,948,410	54,185,935
1969	47,666,461	2,043,815	—	2,690,603	1,104,452	2,197	1,556,533	51,950,995	4,284,534	57,467,963
1970	51,950,995	493,804	—	2,516,126	193,682	20,205	1,799,184	53,375,628	1,424,633	60,289,373
1971	53,375,628	983,556	—	2,280,205	775,500	65	1,953,104	55,461,850	2,086,222	61,964,760
1972	55,461,850	(2,004,125)	—	1,243,897	487,538	(5,580)	2,247,798	52,935,782	(2,526,068)	60,546,769
1973	52,935,782	(167,054)	—	1,257,243	686,714	70,097	2,325,350	52,457,432	(478,350)	60,801,088
1974	52,457,432	2,953,557	—	3,487,099	193,056	10,428	2,393,486	56,708,086	4,250,654	64,459,133
1975	56,708,086	(177,606)	—	2,412,582	362,895	29,869	2,361,110	56,974,716	266,630	71,466,773
1976	56,974,716	(367,880)	—	3,587,990	639,345	(11,053)	2,541,176	58,281,942	1,307,226	76,359,832
1977	58,281,942	1,432,871	—	1,852,325	351,007	46,730	2,492,849	59,472,026	1,190,084	78,031,771
ESTABLISHED RESERVES[c]										
1977	76,835,973	d	—	d	d	46,709	2,492,850	79,180,390	2,344,416	—
1978	79,180,390	2,026,962	—	2,534,342	1,018,734	3,443	2,340,406	82,423,467	3,243,077	—
1979	82,423,467	3,012,475	—	2,062,527	3,347,747	10,613	2,263,030	88,593,799	6,170,332	—

a. Volumes are calculated at a pressure base of 14.65 psia and at a standard temperature of 60°F.
b. Includes proved reserves.
c. For definitions refer to Glossary.
d. Not available.
( ): Denotes negative volume.
Source: Same as Table 2.

TABLE 10

ESTIMATED ESTABLISHED REMAINING MARKETABLE RESERVES OF NATURAL GAS IN CANADA, BY PROVINCE, 1979*

(Millions of cubic feet)

			Remaining Reserves At December 31, 1979				
				Net			
Province	Remaining Reserves December 31, 1978	Change During Year	Total	Non-associated	Associated	Dissolved	Under ground Storage
Canada	**82,423,467**	**6,170,331**	**88,593,799**	**78,758,444**	**6,671,323**	**2,903,581**	**260,451**
Total West, Canada	**82,088,444**	**6,188,824**	**88,277,268**	**78,641,138**	**6,670,045**	**2,903,581**	**62,504**
Alberta	55,004,845	3,431,370	58,436,214	49,260,861	6,349,574	2,772,042	53,737
Artic Islands	10,882,910	3,229,980	14,112,890	14,112,890	—	—	—
Br. Columbia	7,750,538	(390,500)	7,360,039	7,010,676	274,294	75,069	—
Mackenzie Delta	6,597,532	(62,362)	6,535,170	6,535,170	—	—	—
Mainland Territories	598,527	(23,142)	575,385	575,385	—	—	—
Saskatchewan	1,254,092	3,478	1,257,570	1,146,156	46,177	56,470	8,767
Total East, Canada	**335,023**	**(18,493)**	**316,531**	**117,306**	**1,278**	—	**197,947**
Ontario	323,204	(18,457)	304,747	106,800	—	—	197,947
Other E. Canada	11,819	(36)	11,784	10,506	1,278	—	—

*Volumes are calculated at a pressure base of 14.65 psia and at a standard temperature of 60°F.
( ): Denotes negative volume.
Source: Same as Table 2.

TABLE 11

CHANGES IN ESTIMATED ESTABLISHED REMAINING MARKETABLE RESERVES OF NATURAL GAS IN CANADA, BY PROVINCE, DURING 1979*

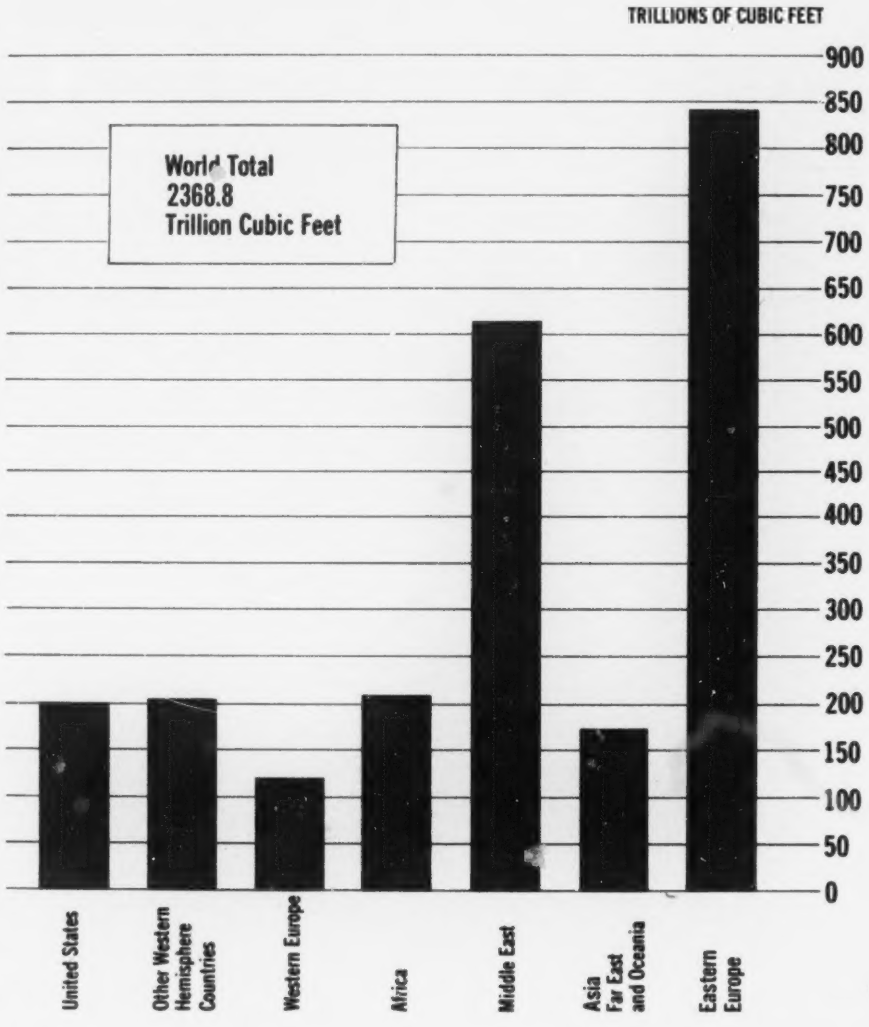
(Millions of cubic feet)

		Changes in Reserves during 1979					
Province	Remaining Reserves December 31, 1978	Revisions	Extensions	Discoveries	Net Change in Underground Storage	Net Production	Remaining Reserves December 31, 1979
Canada	**82,423,467**	**3,012,475**	**2,062,527**	**3,347,747**	**10,613**	**2,263,030**	**88,593,799**
Total West, Canada	**82,088,444**	**3,016,273**	**2,062,527**	**3,346,541**	**12,352**	**2,248,868**	**88,277,268**
Alberta	55,004,845	2,777,437	1,983,838	539,963	13,559	1,883,427	58,436,214
Artic Islands	10,882,910	430,004	—	2,799,976	—	—	14,112,890
Br. Columbia	7,750,538	(111,556)	16,256	6,602	—	301,801	7,360,039
Mackenzie Delta	6,597,532	(62,362)	—	—	—	—	6,535,170
Mainland Territories	598,527	(4,792)	—	—	—	18,350	575,385
Saskatchewan	1,254,092	(12,458)	62,433	—	(1,207)	45,290	1,257,570
Total East, Canada	**335,023**	**(3,798)**	—	**1,206**	**(1,739)**	**14,162**	**316,531**
Ontario	323,204	(3,798)	—	1,206	(1,739)	14,126	304,747
Other E. Canada	11,819	—	—	—	—	36	11,784

*Volumes are calculated at a pressure base of 14.65 psia and at a standard temperature of 60°F.
( ): Denotes negative volume.
Source: Same as Table 2.

CHART 5

WORLD ESTIMATED NATURAL GAS RESERVES, 1978



Source: World Oil, August 15, 1979

SECTION III
NATURAL GAS SUPPLY

	1979	% Change 79/78
Maximum Day Sendout (Trillions of Btu)	83.8	− 9.0
Production (wet) (Trillions of Btu)	21,636	− 0.4
Net Imports (Millions of cubic feet)	1,197,710	+31.2
Producing Gas Wells	165,688	+ 5.2
New Well Completions	14,681	+12.4

TABLE 12
GAS UTILITY INDUSTRY, GAS SUPPLY AND DISPOSITION, 1955-1979[a]

(Trillions of Btu)

	Amount							
	1955	1960	1965	1970	1975	1977	1978	1979
Supply—Produced and Purchased—Total	**7,531.0**	**10,544.6**	**13,315.9**	**18,829.5**	**16,811.5**	**16,322.2**	**16,274.9**	**17,068.4**
Natural	7,531.0	10,544.6	13,315.9	18,661.8	16,490.1	15,905.7	15,860.5	16,520.2
Manufactured	b	b	b	75.6	19.3	15.4	13.3	13.1
Liquefied Petroleum Gas	b	b	b	26.9	24.8	36.8	25.2	18.0
Substitute Natural Gas	b	b	b	1.2	261.3	339.1	297.5	281.2
Liquefied Natural Gas	b	b	b	0.0	8.4	8.2	56.2	202.6
Unclassified	b	b	b	64.0	7.6	17.0	22.2	33.3
Disposition—Total	**7,531.0**	**10,544.6**	**13,315.9**	**18,829.5**	**16,811.5**	**16,322.2**	**16,274.9**	**17,068.4**
Used in Production of Other Gases[c]	311.0	215.9	126.7	125.4	124.2	119.4	77.9	65.3
Company Use as a Fuel[d]	557.7	757.6	995.7	1,380.1	1,089.3	910.8	817.8	919.6
Sales to Ultimate Consumers	6,300.8	9,054.6	11,842.0	16,043.5	14,862.9	14,340.9	14,748.4	15,440.3
Other Deliveries (Net)	56.8	54.9	89.6	70.1	83.9	58.3	66.8	55.6
Placed in Storage (Net)	64.4	164.7	67.6	473.6	348.8	608.6	170.7	291.6
Unaccounted For[e]	240.3	296.9	194.3	736.8	302.4	284.2	393.3	296.0

a. Includes Natural Gas only prior to 1970.
b. Not available.
c. Includes Natural Gas used for enriching, reforming and mixing.
d. Includes interdepartmental transfers.
e. Represents difference between supply and disposition, and should not be interpreted as a reliable measure of transmission efficiency.

TABLE 13
GAS UTILITY INDUSTRY, MAXIMUM AND MINIMUM DAY SENDOUT[a] BY SOURCE OF SUPPLY, 1972-1979[b]

(Trillions of Btu)

	1972	1973	1974	1975	1976	1977	1978	1979
Maximum Day Sendout—Total	**79.9**	**75.2**	**74.1**	**74.6**	**78.9**	**81.8**	**92.1**	**83.8**
Peak Shaving Facilities	2.3	1.3	1.0	0.9	1.9	3.7	3.4	2.0
Underground Storage Withdrawal	30.9	29.7	29.1	31.4	36.3	37.3	36.3	38.3
Regular Production and Purchases	46.7	44.2	44.0	42.3	40.7	40.8	52.4	43.5
Minimum Day Sendout—Total	**21.5**	**22.0**	**21.6**	**19.9**	**19.3**	**17.0**	**16.3**	**17.8**
Average Day Sendout—Total	**46.8**	**45.2**	**43.8**	**40.7**	**40.6**	**39.3**	**40.4**	**42.3**

a. Represents summation of all companies' maximum/minimum day sendout.
b. Excludes sendout of pipeline companies to avoid duplication. Underground storage withdrawals include amounts from fields operated by both distributors and pipelines.

TABLE 14
SUPPLY AND DISPOSITION OF GAS IN THE UNITED STATES, 1955-1978

(Millions of cubic feet)

	Gross Production[a]						Disposition of Marketed Production							
Year	Gas Wells	Oil Wells	Total	Repressuring	Vented and Flared	Marketed Production[b]	Extraction Loss	Lease and Plant Fuel	Net Change in Underground Storage	Pipeline Fuel	Unaccounted For	Domestic Dry Production For Sale	Net Imports	Delivered to Consumers[c]
1955	7,841,958	3,877,836	11,719,794	1,540,804	773,639	9,405,351	1,507,671		67,934	245,246	246,933	7,337,567	(20,141)	7,317,426
1956	8,306,550	4,066,355	12,372,905	1,426,648	864,334	10,081,923	1,420,550		136,470	295,972	212,992	8,015,939	(25,583)	7,990,356
1957	8,716,835	4,189,834	12,906,669	1,417,263	809,148	10,680,258	1,479,720		191,396	299,235	205,373	8,504,534	(3,714)	8,500,820
1958	9,154,051	3,992,584	13,146,635	1,482,975	633,412	11,030,248	1,604,104		83,081	312,221	283,597	8,747,245	97,078	8,844,323
1959	10,101,754	4,127,518	14,229,272	1,612,109	571,048	12,046,115	1,737,402		118,742	349,348	223,312	9,617,311	115,577	9,732,888
1960	10,853,426	4,234,485	15,087,911	1,753,996	562,877	12,771,038	1,779,671		131,694	347,075	274,231	10,238,367	144,314	10,382,681
1961	11,195,087	4,265,225	15,460,312	1,682,754	523,533	13,254,025	1,881,208		145,616	377,607	234,808	10,614,786	208,113	10,822,899
1962	11,702,382	4,336,591	16,038,973	1,736,722	425,629	13,876,622	1,993,128		86,487	382,496	285,726	11,128,785	385,720	11,514,505
1963	12,606,022	4,367,346	16,973,368	1,843,297	383,408	14,746,663	2,081,339		130,772	423,783	364,658	11,746,111	389,247	12,135,358
1964	13,035,200	4,405,100	17,440,300	1,638,161	339,996	15,462,143	2,082,029		128,804	433,204	302,781	12,515,325	421,421	12,936,746
1965	13,523,600	4,439,500	17,963,100	1,604,204	319,143	16,039,753	1,909,697		118,115	500,524	318,711	13,192,706	430,262	13,622,968
1966	13,893,921	5,139,918	19,033,839	1,451,516	375,695	17,206,628	1,772,708		68,855	535,353	401,203	14,428,509	455,141	14,883,650
1967	15,346,853	4,904,923	20,251,776	1,590,574	489,877	18,171,325	784,534	1,140,966	184,829	575,752	296,214	15,189,030	482,612	15,671,642
1968	16,539,925	4,785,075	21,325,000	1,486,092	516,508	19,322,400	827,877	1,237,131	95,539	590,965	325,062	16,245,826	558,140	16,803,966
1969	17,489,415	5,189,780	22,679,195	1,455,205	525,750	20,698,240	866,560	1,345,648	119,500	630,962	331,587	17,403,983	675,647	18,079,630
1970	18,594,658	5,191,795	23,786,453	1,376,351	489,460	21,920,642	906,413	1,398,758	398,160	722,166	227,650	18,267,495	750,967	19,018,462
1971	18,925,136	5,162,895	24,088,031	1,310,458	284,561	22,493,012	883,127	1,413,650	331,768	742,592	338,999	18,782,876	854,336	19,637,212
1972	19,042,592	4,973,517	24,016,109	1,236,292	248,119	22,531,698	907,993	1,455,563	135,734	766,156	328,002	18,938,250	941,483	19,879,733
1973	19,371,600	4,695,602	24,067,202	1,171,361	248,292	22,647,549	916,551	1,495,915	441,504	728,177	195,863	18,869,539	955,732	19,825,271
1974	18,669,212	4,180,581	22,849,793	1,079,890	169,381	21,600,522	887,490	1,477,386	83,663	668,792	288,731	18,194,460	882,495	19,076,955
1975	17,380,293	3,723,237	21,103,530	860,956	133,913	20,108,661	872,282	1,396,277	344,054	582,963	235,068	16,678,020	880,333	17,558,353
1976	17,190,655	3,753,123	20,943,778	859,410	131,930	19,952,438	854,086	1,634,355	(165,327)	548,323	216,240	16,864,760	899,058	17,763,818
1977	17,415,983	3,681,088	21,097,071	934,801	136,807	20,025,463	862,563	1,659,145	556,631	532,669	41,063	16,373,392	955,375	17,328,767
1978	17,394,213	3,914,602	21,308,815	1,181,432	153,350	19,974,033	852,130	1,647,911	120,237	530,451	287,201	16,536,103	913,013	17,449,116

a. Includes gas (mostly residue gas) blown to the air but does not include direct waste on producing properties, except where data are available.
b. "Marketed Production" equals "Total Gross Production" less "Repressuring" and "Vented and Flared". It includes an allowance for natural gas liquids content in the natural gas.
c. Defined as Domestic Dry Production For Sale plus Net Imports.
( ): Denotes negative.
Sources: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual*.
Note: 1979 data reported by U.S. Department of Energy, *Monthly Energy Review* is as follows: "Marketed Production—19,721,000 million of cubic feet (MMcf); "Net Imports"—1,241,000 MMcf; " Net Change in Underground Storage"—239,000 MMcf.

TABLE 15

GROSS PRODUCTION OF NATURAL GAS, BY STATE, 1955-1978[a]

(Millions of cubic feet)

Division and State	1955	1965	1970	1975	1977	1978
United States	**11,719,794**	**17,963,100**	**23,786,453**	**21,103,530**	**21,097,071**	**21,308,815**
New England	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**103,800**	**88,240**	**80,472**	**92,400**	**102,474**	**111,663**
New Jersey	0	0	0	0	0	0
New York	4,000	3,340	3,358	7,628	10,682	13,900
Pennsylvania	99,800	84,900	77,114	84,772	91,792	97,763
East North Central	**92,000**	**82,700**	**97,276**	**191,497**	**234,069**	**268,745**
Illinois	40,400	7,500	4,972	1,440	1,003	1,159
Indiana	4,500	2,400	153	346	183	163
Michigan	12,100	36,900	40,038	103,901	133,226	152,184
Ohio	35,000	35,900	52,113	85,810	99,657	115,239
Wisconsin	0	0	0	0	0	0
West North Central	**558,500**	**866,900**	**965,535**	**877,137**	**816,864**	**897,240**
Iowa	0	0	0	0	0	0
Kansas	525,000	806,800	904,475	846,164	782,637	857,071
Minnesota	0	0	0	0	0	0
Missouri	b	b	b	30	20	0
Nebraska	18,000	12,100	6,309	3,963	2,849	2,882
North Dakota	15,500	48,000	54,751	26,941	30,289	37,287
South Dakota	0	0	b	39	69	0
South Atlantic	**218,084**	**211,060**	**246,599**	**205,683**	**209,847**	**208,739**
Delaware	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0
Florida	b	b	b	44,383	48,778	51,595
Georgia	0	0	0	0	0	0
Maryland	3,116	408	813	93	82	88
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	968	3,152	2,805	6,723	8,220	8,492
West Virginia	214,000	207,500	242,981	154,484	152,767	148,564
East South Central	**342,000**	**277,300**	**234,912**	**192,544**	**225,179**	**310,020**
Alabama	b	b	b	38,921	61,267	90,012
Kentucky	76,000	79,100	77,892	60,511	60,902	70,044
Mississippi	266,000	198,200	157,020	92,500	102,155	148,482
Tennessee	b	b	b	612	855	1,482
West South Central	**8,794,000**	**14,022,900**	**19,469,337**	**17,073,397**	**16,857,668**	**16,647,141**
Arkansas	55,000	104,000	183,650	121,518	122,756	127,954
Louisiana	1,948,000	4,764,300	8,076,157	7,242,408	7,350,929	7,638,931
Oklahoma	955,000	1,414,000	1,811,004	1,720,698	1,888,070	1,892,413
Texas	5,836,000	7,740,600	9,398,526	7,988,773	7,495,913	6,987,843
Mountain	**808,900**	**1,492,500**	**1,744,236**	**1,849,992**	**1,889,682**	**1,884,932**
Arizona	b	b	b	255	343	286
Colorado	97,000	155,200	115,157	174,145	190,647	185,019
Idaho	0	0	0	0	0	0
Montana	29,000	29,800	48,302	44,547	48,181	48,497
Nevada	0	0	-0-	0	0	0
New Mexico	565,000	956,500	1,141,889	1,227,200	1,222,870	1,198,593
Utah	17,900	92,100	73,386	77,607	82,599	80,227
Wyoming	100,000	258,900	365,502	326,238	345,042	372,310
Pacific	**802,000**	**917,800**	**945,099**	**620,880**	**761,288**	**980,335**
Alaska	0	12,800	217,854	253,227	373,791	596,834
California	802,000	905,000	727,245	367,653	387,497	383,501
Hawaii	0	0	0	0	0	0
Oregon	0	0	0	0	0	0
Washington	0	0	0	0	0	0
Other States	**510**	**3,700**	**2,987**	**0**	**0**	**0**

a. Includes gas (mostly residue gas) blown to the air, but does not include direct waste on producing properties, except where data are available.

b. Included in "Other States."

Source: Energy Administration Association, U.S. Department of Energy, *Natural Gas Annual*.

TABLE 16

NET WELLHEAD PRODUCTION OF NATURAL GAS, BY STATE, 1955-1978[a]

(Millions of cubic feet)

Division and State	1955	1965	1970	1975	1977	1978
United States	**10,178,990**	**16,358,896**	**22,410,102**	**20,242,574**	**20,162,270**	**20,127,383**
New England	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**103,653**	**87,842**	**80,199**	**92,400**	**102,474**	**111,663**
New Jersey	0	0	0	0	0	0
New York	4,000	3,340	3,358	7,628	10,682	13,900
Pennsylvania	99,653	84,502	76,841	84,772	91,792	97,763
East North Central	**89,101**	**80,800**	**96,898**	**190,471**	**233,088**	**266,203**
Illinois	39,763	7,500	4,972	1,440	1,003	1,159
Indiana	4,463	2,400	153	346	183	163
Michigan	9,930	35,000	39,660	103,725	132,245	150,783
Ohio	34,945	35,900	52,113	84,960	99,657	114,098
Wisconsin	0	b	0	0	0	0
West North Central	**555,971**	**860,204**	**963,410**	**875,409**	**815,235**	**895,514**
Iowa	0	0	0	0	0	0
Kansas	522,826	806,683	902,668	844,471	782,072	855,345
Minnesota	0	0	0	0	0	0
Missouri	b	b	b	30	20	0
Nebraska	17,645	11,985	5,991	3,963	2,849	2,882
North Dakota	15,500	41,536	54,751	26,941	30,289	37,287
South Dakota	0	0	b	4	5	0
South Atlantic	**217,968**	**211,044**	**246,070**	**205,683**	**209,847**	**208,739**
Delaware	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0
Florida	b	b	b	44,383	48,778	51,595
Georgia	0	0	0	0	0	0
Maryland	3,116	408	813	93	82	88
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	968	3,152	2,805	6,723	8,220	8,492
West Virginia	213,884	207,484	242,452	154,484	152,767	148,564
East South Central	**279,323**	**255,601**	**211,156**	**186,251**	**216,237**	**300,775**
Alabama	b	b	b	38,921	58,407	87,294
Kentucky	75,921	79,100	77,892	60,511	60,902	70,044
Mississippi	203,402	176,501	133,264	86,207	96,509	142,852
Tennessee	b	b	b	612	419	585
West South Central	**7,614,965**	**12,769,359**	**18,306,535**	**16,387,930**	**16,230,578**	**15,988,776**
Arkansas	38,351	83,845	181,577	117,555	105,249	107,661
Louisiana	1,746,236	4,589,349	7,942,365	7,116,104	7,248,257	7,506,304
Oklahoma	829,055	1,356,738	1,724,572	1,637,212	1,798,705	1,801,071
Texas	5,001,323	6,739,427	8,458,021	7,517,059	7,078,367	6,573,740
Mountain	**770,995**	**1,416,853**	**1,705,299**	**1,813,914**	**1,838,778**	**1,832,089**
Arizona	b	b	b	255	240	286
Colorado	68,863	131,342	112,930	174,145	190,320	184,801
Idaho	0	0	0	0	0	0
Montana	28,873	29,221	47,908	43,936	47,914	47,930
Nevada	0	0	0	0	0	0
New Mexico	562,227	945,794	1,141,889	1,219,072	1,208,038	1,182,361
Utah	17,900	72,306	45,633	57,160	61,387	58,885
Wyoming	93,132	238,190	356,939	319,346	330,879	357,826
Pacific	**546,504**	**673,493**	**798,000**	**490,516**	**516,033**	**523,624**
Alaska	0	7,331	146,384	170,671	203,533	211,580
California	546,504	666,162	651,616	319,845	312,500	312,044
Hawaii	0	0	0	0	0	0
Oregon	0	0	0	0	0	0
Washington	0	0	0	0	0	0
Other States	**510**	**3,700**	**2,535**	**0**	**0**	**0**

a. As defined by A.G.A. "Net Wellhead Production" equals "Gross Production" less gas for repressuring (see Table 14) and therefore includes natural gas liquids.
b. Included in "Other States."
Source: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual.*

TABLE 17
MARKETED PRODUCTION OF NATURAL GAS, BY STATE, 1955-1978

(Millions of cubic feet)

Division and State	1955	1965	1970	1975	1977	1978
United States	**9,405,351**	**16,039,753**	**21,920,687**	**20,108,661**	**20,025,463**	**19,974,033**
New England	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**102,809**	**87,801**	**80,199**	**92,304**	**102,399**	**111,663**
New Jersey	0	0	0	0	0	0
New York	3,637	3,340	3,358	7,628	10,682	13,900
Pennsylvania	99,172	84,461	76,841	84,676	91,717	97,763
East North Central	**51,315**	**77,877**	**95,967**	**188,859**	**230,467**	**263,467**
Illinois	8,033	7,396	4,850	1,440	1,003	1,159
Indiana	1,226	239	153	346	183	163
Michigan	8,300	34,558	38,851	102,113	129,954	148,047
Ohio	33,756	35,684	52,113	84,960	99,327	114,098
Wisconsin	0	0	0	0	0	0
West North Central	**488,812**	**839,751**	**940,922**	**871,006**	**813,271**	**887,865**
Iowa	0	0	0	0	0	0
Kansas	471,041	793,379	899,955	843,625	781,287	854,484
Minnesota	0	0	0	0	0	0
Missouri	*	*	87	30	20	0
Nebraska	12,515	10,720	5,991	2,565	2,789	2,882
North Dakota	5,256	35,652	34,889	24,786	29,173	30,499
South Dakota	0	*	0	0	0	0
South Atlantic	**216,487**	**210,976**	**246,115**	**205,683**	**209,240**	**208,739**
Delaware	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0
Florida	*	*	0	44,383	48,171	51,595
Georgia	0	0	0	0	0	0
Maryland	3,116	408	813	93	82	88
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	968	3,152	2,850	6,723	8,220	8,492
West Virginia	212,403	207,416	242,452	154,484	152,767	148,564
East South Central	**236,381**	**245,801**	**204,614**	**172,697**	**201,387**	**262,690**
Alabama	*	*	627	37,814	57,227	85,599
Kentucky	73,214	78,976	77,892	60,511	60,902	70,044
Mississippi	163,167	166,825	126,031	74,345	82,995	106,579
Tennessee	*	*	64	27	263	468
West South Central	**7,057,929**	**12,507,167**	**17,922,286**	**16,298,056**	**16,139,648**	**15,905,055**
Arkansas	32,123	82,831	181,351	116,237	104,096	106,792
Louisiana	1,680,032	4,466,786	7,788,276	7,090,645	7,215,006	7,476,497
Oklahoma	614,976	1,320,995	1,594,943	1,605,410	1,769,519	1,773,582
Texas	4,730,798	6,636,555	8,357,716	7,485,764	7,051,027	6,548,184
Mountain	**713,053**	**1,399,156**	**1,669,891**	**1,801,478**	**1,829,700**	**1,820,382**
Arizona	*	*	1,101	208	240	286
Colorado	49,152	126,381	105,804	171,629	188,792	183,693
Idaho	0	0	0	0	0	0
Montana	28,255	28,105	42,705	40,734	46,819	46,522
Nevada	0	0	0	0	0	0
New Mexico	540,664	937,205	1,138,980	1,217,430	1,202,973	1,174,198
Utah	17,163	71,616	42,781	55,354	60,696	58,416
Wyoming	77,819	235,849	338,520	316,123	330,180	357,267
Pacific	**538,178**	**667,639**	**760,693**	**478,578**	**499,351**	**514,172**
Alaska	0	7,255	111,576	160,270	187,889	203,088
California	538,178	660,384	649,117	318,308	311,462	311,084
Hawaii	0	0	0	0	0	0
Oregon	0	0	0	0	0	0
Washington	0	0	0	0	0	0
Other States	**387**	**3,585**	**0**	**0**	**0**	**0**

*Included in "Other States."
Source: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual.*

TABLE 18
NATURAL GAS DELIVERED TO CONSUMERS BY STATE, 1955-1978[a]

(Millions of cubic feet)

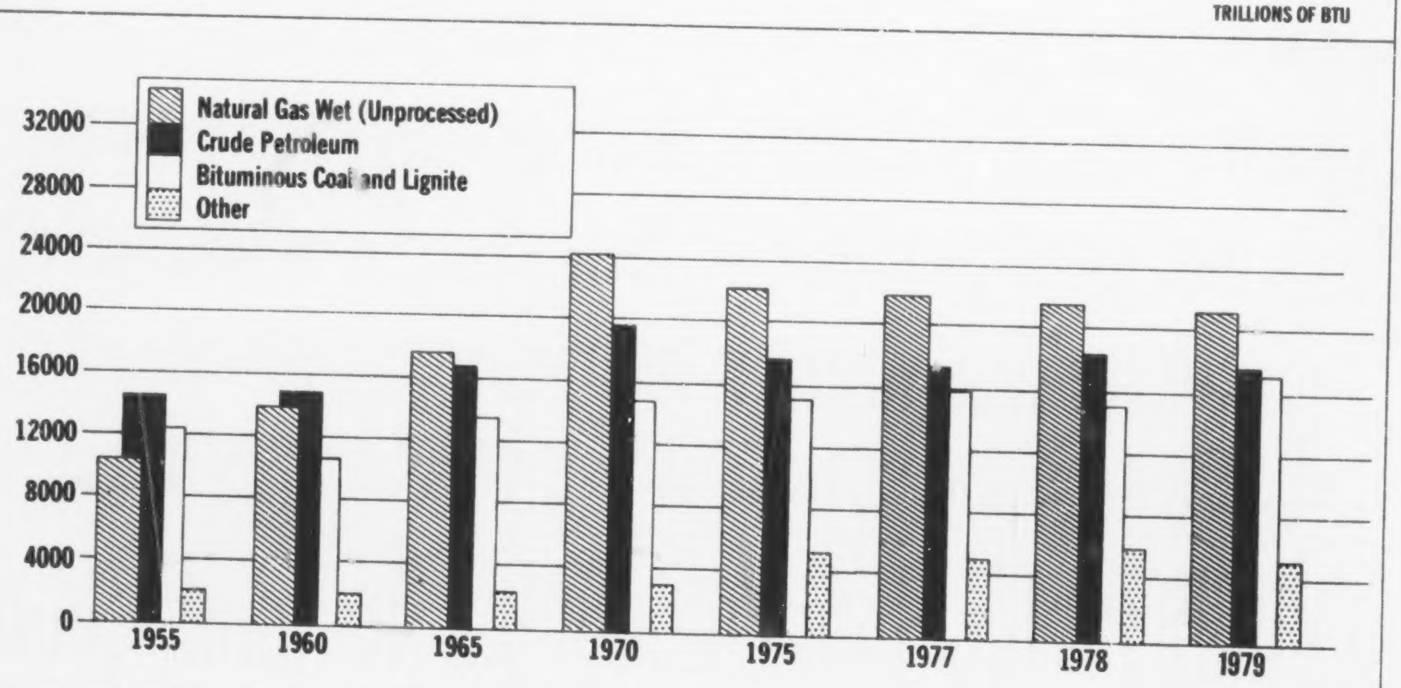
Division and State	1955	1965	1970	1975	1977	1978
United States	**7,317,426**	**13,622,968**	**19,018,462**	**17,588,353**	**17,328,767**	**17,449,116**
New England	**63,358**	**175,051**	**242,507**	**254,070**	**263,135**	**262,220**
Connecticut	14,130	40,722	60,524	63,968	64,054	65,151
Maine	0	0	10,691[b]	13,534[b]	13,609[b]	14,039[b]
Massachusetts	42,730	113,994	146,226	153,461	159,856	160,000
New Hampshire	1,206	4,084	c	c	c	c
Rhode Island	5,292	16,251	25,066	23,107	25,616	23,030
Vermont	0	0	c	c	c	c
Middle Atlantic	**695,487**	**1,357,337**	**1,772,600**	**1,451,698**	**1,447,208**	**1,441,712**
New Jersey	74,424	209,306	321,910	243,714	246,558	228,339
New York	242,144	540,672	707,219	573,699	558,760	566,198
Pennsylvania	378,919	607,359	743,471	634,285	641,890	647,175
East North Central	**1,225,971**	**2,706,665**	**3,843,966**	**3,718,831**	**3,446,390**	**3,658,817**
Illinois	365,443	742,906	1,145,379	1,080,787	1,147,816	1,161,536
Indiana	122,501	349,827	534,214	467,736	393,505	436,085
Michigan	203,183	548,390	795,317	865,539	721,661	774,943
Ohio	494,627	866,589	1,037,801	944,925	836,628	917,194
Wisconsin	40,217	198,953	331,255	359,844	346,780	369,059
West North Central	**805,965**	**1,398,950**	**1,826,005**	**1,686,051**	**1,582,585**	**1,537,634**
Iowa	132,050	236,443	330,363	329,703	273,271	233,298
Kansas	242,012	385,364	481,483	402,273	421,450	425,698
Minnesota	123,606	247,561	334,872	327,315	289,735	309,570
Missouri	191,015	332,219	416,783	362,130	362,314	353,992
Nebraska	96,608	155,359	207,550	207,371	175,863	152,942
North Dakota	d	15,069	18,645	24,757	23,882	26,743
South Dakota	20,674[e]	26,935	36,309	32,502	36,070	35,391
South Atlantic	**401,426**	**909,869**	**1,465,035**	**1,268,171**	**1,179,573**	**1,226,013**
Delaware	f	17,969	26,421	18,603	15,787	20,623
District of Columbia	f	f	f	f	f	f
Florida	26,366	182,093	332,223	271,471	296,573	311,893
Georgia	133,044	206,560	325,650	322,383	261,733	274,832
Maryland	58,301[g]	113,943[h]	179,784[h]	163,462[h]	156,380[h]	158,945[h]
North Carolina	10,620	71,473	145,076	111,276	70,330	79,390
South Carolina	21,977	84,564	156,559	120,308	135,388	113,690
Virginia	36,640	88,907	128,492	118,083	115,143	131,270
West Virginia	114,478	144,360	170,830	142,585	128,239	135,370
East South Central	**457,380**	**727,845**	**1,009,983**	**809,664**	**774,412**	**747,478**
Alabama	144,957	216,998	278,414	245,287	225,603	223,048
Kentucky	93,790	142,438	209,991	182,781	199,285	188,669
Mississippi	108,264	189,603	293,154	183,807	161,747	166,644
Tennessee	110,369	178,806	228,424	197,789	187,777	169,117
West South Central	**2,377,047**	**3,848,796**	**5,545,215**	**5,332,025**	**5,738,965**	**5,862,752**
Arkansas	171,600	255,637	359,338	241,803	216,484	205,680
Louisiana	601,651	857,118	1,482,275	1,425,686	1,516,475	1,609,552
Oklahoma	181,308	389,314	475,974	565,387	661,931	669,121
Texas	1,422,488	2,346,727	3,227,628	3,099,149	3,344,075	3,378,401
Mountain	**440,802**	**757,368**	**1,020,744**	**982,840**	**919,807**	**906,796**
Arizona	82,897[i]	136,297	168,994	139,130	152,181	159,866
Colorado	129,442	219,602	277,739	294,760	266,285	252,360
Idaho	0	32,831	42,367	56,182	40,872	39,770
Montana	43,871	64,320	81,992	75,441	66,515	68,305
Nevada	j	27,679	52,558	61,251	71,052	64,506
New Mexico	108,406	130,072	191,818	172,638	163,905	152,844
Utah	48,563	105,524	120,814	116,620	98,291	109,210
Wyoming	27,623	41,043	84,462	66,818	60,706	59,935
Pacific	**849,990**	**1,741,087**	**2,292,407**	**2,055,003**	**1,976,692**	**1,805,692**
Alaska	0	5,917	41,672	66,815	98,682	128,943
California	849,990	1,572,367	2,017,393	1,727,729	1,677,718	1,478,849
Hawaii	0	0	0	0	0	0
Oregon	0	55,383	89,776	101,980	63,820	77,409
Washington	0	107,420	143,566	158,479	136,472	120,491

a. Includes deliveries made directly to end users in addition to gas utility sales as shown in Table 66.
b. Includes New Hampshire and Vermont.
c. Included in Maine.
d. Included in South Dakota.
e. Includes North Dakota.
f. Included in Maryland.
g. Includes Delaware and District of Columbia.
h. Includes District of Columbia.
i. Includes Nevada.
j. Included in Arizona.

Source: Energy Information Administration. U.S. Department of Energy, *Natural Gas Annual*.

CHART 6

UNITED STATES ENERGY PRODUCTION



REFERENCE: TABLE 19

TABLE 19

ANNUAL PRODUCTION OF FOSSIL ENERGY RESOURCES AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER IN THE UNITED STATES, 1955-1979

(Trillions of Btu)[a]

Year	Natural Gas Wet (unprocessed)	Crude Petroleum	Bituminous Coal and Lignite	Anthracite Coal	Hydropower[b]	Nuclear[c]	Grand Total Energy
1955	10,204	14,410	12,174	665	1,447	—	38,900
1960	13,822	14,935	10,886	478	1,578	5	41,704
1961	14,691	15,185	10,558	443	1,605	17	42,499
1962	15,365	15,495	11,060	429	1,774	23	44,146
1963	16,271	15,741	12,024	464	1,741	33	46,274
1964	16,989	16,164	12,759	436	1,861	34	48,243
1965	17,628	16,521	13,417	378	2,033	38	50,015
1966	18,984	16,925	13,507	329	2,062	57	51,864
1967	20,087	18,100	13,904	311	2,347	80	54,829
1968	21,548	18,593	13,664	291	2,349	130	56,575
1969	22,838	18,886	13,957	266	2,648	146	58,741
1970	24,154	19,772	14,820	247	2,630	229	61,852
1971	24,805	20,033	13,385	222	2,825	404	61,674
1972	24,792	20,041	14,319	181	2,866	576	62,775
1973	24,764	19,493	14,208	174	2,680	888	62,387
1974	23,689	18,575	14,319	168	3,177	1,211	61,139
1975	22,022	17,729	15,044	158	3,155	1,839	59,947
1976	21,831	17,262	15,610	158	2,974	2,037	59,872
1977R	21,892	17,454	15,829	d	2,337	2,702	60,214
1978R	21,730	18,434	15,037	d	2,962	2,977	61,140
1979	21,636	18,064	17,406	d	2,957	2,750	62,813

a. The unit heat values employed are: Anthracite, 12,700 Btu per pound; bituminous coal and lignite, 12,005 Btu per pound; petroleum approx. 5,800,000 Btu per barrel, obtained by using 5,248,000 for gasoline, 5,670,000 for kerosene, 5,825,000 for distillate, 6,287,000 for residual, 6,065,000 for lubricants, 5,537,000 for wax, 6,636,000 for asphalt and 5,796,000 miscellaneous; natural gas dry 1,021 Btu per cubic foot; natural gas liquids obtained by using 110,000 Btu per gallon for natural gasoline; 95,500 Btu per gallon for LP gas and ethane at 73,390 Btu per gallon.

b. Hydropower output is converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants obtained from the Federal Power Commission.

c. Nuclear power energy input conversion is based on information from the Atomic Power Commission.

d. Included in "Bituminous Coal and Lignite."

Source: Prior to 1977 U.S. Bureau of Mines, for 1977 and beyond, data taken from *Monthly Energy Review*, U.S. Dept. of Energy.

R—Revised

TABLE 20

ANNUAL PRODUCTION OF FOSSIL ENERGY RESOURCES AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER IN THE UNITED STATES, 1955-1979

(Percentage)

Year	Natural Gas Wet (unprocessed)	Crude Petroleum	Bituminous Coal and Lignite	Anthracite Coal	Hydropower	Nuclear	Grand Total Energy
1955	26.2	37.1	31.3	1.7	3.7	—	100.0
1960	33.2	35.8	26.1	1.1	3.8	a	100.0
1961	34.7	35.8	24.8	1.0	3.7		100.0
1962	34.8	35.1	25.0	1.0	4.0	0.1	100.0
1963	35.1	34.0	26.0	1.0	3.8	0.1	100.0
1964	35.2	33.5	26.4	0.9	3.9	0.1	100.0
1965	35.2	33.0	26.8	0.8	4.1	0.1	100.0
1966	36.6	32.6	26.1	0.6	4.0	0.1	100.0
1967	36.6	33.0	25.4	0.6	4.3	0.1	100.0
1968	38.1	32.8	24.2	0.5	4.2	0.2	100.0
1969	38.9	32.2	23.8	0.4	4.5	0.2	100.0
1970	39.0	32.0	24.0	0.4	4.2	0.4	100.0
1971	40.7	32.5	21.7	0.4	4.6	0.6	100.0
1972	39.9	31.9	22.8	0.3	4.6	0.9	100.0
1973	39.7	31.2	22.8	0.3	4.6	1.4	100.0
1974	38.7	30.4	23.4	0.3	5.2	2.0	100.0
1975	36.7	29.6	25.1	0.3	5.3	3.0	100.0
1976	36.5	28.8	26.1	0.3	5.0	3.3	100.0
1977	36.4	29.0	26.3	b	3.9	4.5	100.0
1978	35.5	30.2	24.6	b	4.8	4.9	100.0
1979	34.0	29.0	28.0	b	5.0	4.0	100.0

a. Less than 0.05.

b. Included in "Bituminous Coal and Lignite."

Source: Same as Table 19.

TABLE 21
TOTAL OFFSHORE PRODUCTION OF NATURAL GAS AND PERCENT STATE/FEDERALLY CONTROLLED, BY STATE, 1955-1979

	Alaska			California			Louisiana			Texas			Total		
		Percent			Percent			Percent			Percent			Percent	
Year	MMcf	State	OCS	MMcf	State	OCS	MMcf	State	OCS	MMcf	State	OCS	MMcf	State	OCS
1955	—	—	—	—	100	—	121,279	33	67	6,880	100	—	128,159	37	63
1956	—	—	—	—	100	—	136,527	39	61	6,880	100	—	143,407	42	58
1957	—	—	—	—	100	—	160,472	49	51	13,765	100	—	174,237	53	47
1958	—	—	—	—	100	—	233,967	45	55	24,080	100	—	258,047	51	49
1959	—	—	—	—	100	—	329,280	37	63	24,080	100	—	353,360	41	59
1960	—	—	—	1,113	100	—	408,388	33	67	30,960	100	—	440,461	38	62
1961	—	—	—	5,903	100	—	458,481	31	69	13,760	100	—	478,144	33	67
1962	—	—	—	10,671	100	—	588,361	23	77	41,280	100	—	640,312	29	71
1963	—	—	—	25,769	100	—	706,545	20	80	30,960	100	—	763,274	26	74
1964	—	—	—	35,323	100	—	783,474	21	79	30,960	100	—	849,757	27	73
1965	10	100	—	40,770	100	—	871,124	26	74	27,520	100	—	939,424	31	69
1966	1,200	100	—	46,839	100	—	1,265,899	24	76	59,259	29	71	1,373,197	27	73
1967	8,324	100	—	46,732	100	—	1,655,223	34	66	127,473	22	78	1,837,752	35	65
1968	22,844	100	—	86,565	99	1	2,057,291	31	69	154,631	29	71	2,321,331	34	66
1969	44,393	100	—	81,326	94	6	2,478,745	26	74	240,212	47	53	2,844,676	31	69
1970	82,369	100	—	71,225	83	17	2,800,104	19	81	264,420	50	50	3,218,118	25	75
1971	83,750	100	—	60,484	74	26	3,219,200	18	82	387,245	67	33	3,750,679	26	74
1972	74,982	100	—	44,830	78	22	3,480,831	17	83	156,772	6	94	3,757,415	19	81
1973	72,526	100	—	37,581	81	19	3,614,892	15	85	250,338	41	59	3,975,337	17	83
1974	73,295	100	—	30,156	82	18	3,871,964	14	86	254,338	37	63	4,229,753	17	83
1975	75,581	100	—	27,272	86	14	3,821,746	13	87	332,862	63	37	4,257,461	19	81
1976	72,164	100	—	14,305	76	24	4,003,808	13	87	206,043	55	45	4,296,320	16	84
1977	75,735	100	—	14,961	78	22	4,094,784	11	89	354,531	75	25	4,540,011	18	82
1978	46,517	100	—	16,772	79	21	4,909,206	11	89	402,000	58	42	5,374,495	14	86
1979	49,319	100	—	15,969	82	18	4,636,462	10	90	719,208	29	71	5,420,958	14	86

Source: U.S. Department of the Interior, Geological Survey, *Outer Continental Shelf Statistics*.

TABLE 22
EXPORTS OF NATURAL GAS FROM THE UNITED STATES, 1955-1979

(Millions of cubic feet)

Year	Total	Canada	Mexico	Japan*
1955	31,397	11,494	19,903	0
1960	16,100	5,574	10,526	0
1965	27,428	17,892	9,536	0
1966	54,860	44,958	9,902	0
1967	81,595	70,456	11,139	0
1968	93,745	81,647	12,098	0
1969	51,308	34,936	13,390	2,982
1970	69,813	10,860	14,678	44,275
1971	80,365	14,349	15,785	50,231
1972	78,014	15,553	14,579	47,882
1973	77,169	14,824	13,999	48,346
1974	76,789	13,263	13,268	50,258
1975	72,675	10,219	9,454	53,002
1976	64,710	7,506	7,425	49,779
1977	55,626	31	3,940	51,655
1978	52,533	66	4,033	48,434
1979	55,673	76	4,308	51,289

*LNG exports from Alaska.
Source: Federal Energy Regulatory Commission.

TABLE 23
IMPORTS OF NATURAL GAS TO THE UNITED STATES, 1955-1979

(Millions of cubic feet)

Year	Total	Canada	Mexico	Algeria*
1955	10,892	10,885	7	0
1960	156,843	109,855	46,988	0
1965	456,694	404,687	52,007	0
1966	480,591	431,955	48,636	0
1967	564,228	513,256	50,972	0
1968	651,885	604,462	47,423	0
1969	726,952	680,107	46,845	0
1970	820,781	778,688	41,336	757
1971	934,547	910,925	20,689	2,933
1972	1,019,495	1,009,092	8,140	2,262
1973	1,032,903	1,027,216	1,632	4,055
1974	959,285	959,063	222	0
1975	953,007	948,114	0	4,893
1976	963,768	953,613	0	10,155
1977	1,010,431	996,723	2,384	11,324
1978	965,545	881,123	0	84,422
1979	1,253,383	1,000,775	0	252,608

*Quantities represent total LNG imports into the U.S.
Source: Federal Energy Regulatory Commission.

TABLE 24

NATURAL GAS TREATED FOR NATURAL GASOLINE AND ALLIED PRODUCTS, AND QUANTITIES AND VALUE OF PRODUCTS RECOVERED, 1955-1979[a]

	Natural Gas Treated	Products Recovered							
		Natural Gasoline		Liquefied Petroleum Gases		Finished Gasoline and Naphtha		Other Products[b]	
Year	(Millions of cubic feet)	Quantity (Thousands of gallons)	Value (Thousands of dollars)	Quantity (Thousands of gallons)	Value (Thousands of dollars)	Quantity (Thousands of gallons)	Value (Thousands of dollars)	Quantity (Thousands of gallons)	Value (Thousands of dollars)
1955	8,185,953	4,457,079	$313,075	5,972,698	$ 195,231	823,103	$72,192	564,722	$ 38,508
1956	8,445,009	4,438,890	316,646	6,487,413	265,185	832,915	75,102	535,295	40,210
1957	8,578,561	4,499,495	305,937	6,655,282	263,665	779,907	72,154	455,005	37,700
1958	8,452,544	4,355,025	300,666	6,783,000	296,571	701,456	53,401	539,977	39,072
1959	9,186,862	4,222,266	290,311	7,874,706	349,802	660,666	56,517	714,170	61,866
1960	9,768,189	4,479,454	313,058	8,444,074	391,566	503,659	43,400	859,394	60,361
1961	10,261,669	4,666,319	311,966	9,085,465	370,186	473,496	31,996	965,648	68,057
1962	11,089,241	4,772,260	333,965	9,409,083	353,334	450,991	37,347	1,021,271	73,505
1963	12,430,353	4,899,323	320,131	10,302,250	359,770	499,901	40,922	1,135,743	78,120
1964	13,176,126	5,286,703	341,714	10,743,591	362,792	506,505	37,815	1,206,973	84,071
1965	13,772,101	5,457,367	360,603	11,257,267	417,249	439,267	36,270	1,391,436	97,481
1966	14,924,429	5,564,139	366,332	12,134,294	527,223	380,135	33,380	1,604,154	120,426
1967	15,641,633	5,850,271	389,156	13,717,861	632,994	307,263	28,044	1,731,727	129,742
1968	16,316,674	6,210,708	411,695	14,753,004	552,335	280,728	26,577	1,868,622	133,407
1969	17,655,108	6,633,018	457,986	15,895,194	498,927	374,514	36,954	1,467,396	108,144
1970	18,509,309	6,935,838	468,602	16,783,662	672,088	240,702	23,234	1,488,270	111,188
1971	19,252,807	6,942,474	496,676	17,540,628	769,397	224,784	23,210	1,240,344	96,771
1972	19,906,893	6,875,442	500,425	18,678,912	828,718	186,732	20,737	1,063,986	83,261
1973	19,679,291	6,791,736	568,214	18,775,386	1,188,289	136,038	13,902	942,606	86,668
1974	18,684,480	6,212,766	974,825	18,813,732	1,980,769	52,878	10,028	797,664	122,305
1975	17,748,426	5,620,608	777,637	18,651,612	1,893,890	45,528	8,411	712,488	92,650
1976	17,717,951	5,575,584	882,718	18,369,372	2,298,647	40,572	9,650	670,362	93,074
1977	17,569,835	5,587,134	c	18,604,152	c	30,156	c	577,668	c
1978	c	5,306,784	c	18,124,512	c	28,896	c	567,420	c
1979p	c	4,809,336	c	26,337,696	c	275,604	c	1,746,402	c

a. Due to changes in reporting requirements, 1979 data is not comparable with prior years.
b. Includes plant condensate, kerosene, distillate fuel oil, and miscellaneous products.
c. Not available.
Source: Energy Information Administration, U.S. Department of Energy.
p—Preliminary.

TABLE 25
NUMBER OF PRODUCING GAS WELLS, BY STATE, 1955-1979[a]

Division and State	1955	1960	1965	1970	1975	1978[R]	1979[p]
United States	**71,475**	**90,761**	**111,680**	**117,483**	**132,095**	**157,454**	**165,688**
New England	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**17,480**	**17,350**	**18,666**	**16,839**	**18,200**	**20,800**	**21,100**
New Jersey	0	0	0	0	0	0	0
New York	1,180	1,000	1,150	600	900	1,900	2,200
Pennsylvania	16,300	16,350	17,516	16,239	17,300	18,900	18,900
East North Central	**6,890**	**7,612**	**7,626**	**9,082**	**11,110**	**15,265**	**16,329**
Illinois	30	45	25	8	41	51	51
Indiana	400	350	275	50	478	641	631
Michigan	260	154	226	1,235	209	376	376
Ohio	6,200	7,063	7,100	7,789	10,382	14,197	15,271
Wisconsin	0	0	0	0	0	0	0
West North Central	**5,132**	**6,093**	**7,281**	**8,735**	**8,925**	**9,522**	**10,396**
Iowa	0	0	0	0	0	0	0
Kansas	5,100	6,003	7,200	8,660	8,865	9,450	10,351
Minnesota	0	0	0	0	0	0	0
Missouri	32[b]	9	11	11	3	7	0
Nebraska	b	53	39	35	19	22	23
North Dakota	c	28	31	29	18	23	22
South Dakota	c	0	0	0	20	20	0
South Atlantic	**14,000**	**14,630**	**19,719**	**20,833**	**21,901**	**23,814**	**24,693**
Delaware	0	0	0	0	0	0	0
District of Colmbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0
Maryland	c	38	20	16	15	12	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	c	92	99	115	186	227	268
West Virginia	14,000	14,500	19,600	20,702	22,700	23,575	24,425
East South Central	**4,358**	**5,263**	**6,490**	**7,255**	**7,684**	**8,442**	**8,603**
Alabama	c	4	0	2	45	189	264
Kentucky	4,100	4,829	6,100	6,913	7,386	7,776	7,765
Mississippi	230	400	370	325	248	402	431
Tennessee	28	30	20	15	5	75	143
West South Central	**19,440**	**31,261**	**40,502**	**42,283**	**48,440**	**60,686**	**62,350**
Arkansas	240	370	744	1,008	1,128	1,335	1,200
Louisiana	3,600	6,479	8,563	9,690	11,359	13,333	10,848
Oklahoma	4,200	5,800	7,447	8,168	9,769	12,861	14,062
Texas	11,400	18,612	23,748	23,417	26,184	33,157	36,240
Mountain	**3,580**	**7,898**	**10,352**	**11,425**	**14,189**	**17,742**	**18,436**
Arizona	0	1	8	4	1	1	0
Colorado	100	466	701	861	1,380	2,318	2,444
Idaho	0	0	0	0	0	0	0
Montana	1,060	999	784	739	1,235	1,755	1,881
Nevada	0	0	0	0	0	0	0
New Mexico	2,200	6,047	8,010	8,848	10,352	12,609	12,922
Utah	c	35	148	173	271	171	182
Wyoming	220	350	701	800	950	888	1,007
Pacific	**470**	**654**	**1,044**	**1,031**	**1,646**	**1,183**	**894**
Alaska	0	2	11	51	61	52	56
California	470	652	1,033	980	1,585	1,131	838
Hawaii	0	0	0	0	0	0	0
Oregon	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Other States	**125**	**0**	**0**	**0**	**0**	**0**	**21**
Federal Waters	**d**	**d**	**d**	**d**	**d**	**d**	**2,866**

a. Data pertain only to dry gas and condensate wells. Data as of December 31.
b. Nebraska included in Missouri.
c. Either none or included in "Other States."
d. "Federal Waters" is included in Texas, Louisiana, and California totals.
p—Preliminary.
R—Revised.
Source: Same as Table 14. Preliminary numbers taken from *World Oil*, February 1980.

TABLE 26
NEW GAS WELL COMPLETIONS, BY STATE, 1955-1979[a]

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	**3,613**	**3,952**	**4,724**	**3,840**	**7,580**	**13,064**	**14,681**
New England	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**293**	**297**	**304**	**267**	**876**	**1,330**	**1,346**
New Jersey	0	0	0	0	0	0	0
New York	2	28	18	17	236	224	302
Pennsylvania	291	269	286	250	640	1,106	1,044
East North Central	**307**	**306**	**317**	**711**	**610**	**1,502**	**2,088**
Illinois	16	8	8	5	5	15	16
Indiana	22	12	10	4	17	43	28
Michigan	19	26	36	19	33	54	60
Ohio	250	260	263	683	555	1,390	1,984
Wisconsin	0	0	0	0	0	0	0
West North Central	**366**	**202**	**207**	**111**	**440**	**940**	**804**
Iowa	0	0	0	0	0	0	0
Kansas	362	200	206	108	438	925	748
Minnesota	0	0	0	0	0	0	0
Missouri	4[b]	0	0	0	1	1	4
Nebraska	b	2	1	2	1	12	25
North Dakota	0	0	0	1	0	1	19
South Dakota	0	0	0	0	0	1	8
South Atlantic	**443**	**694**	**697**	**553**	**582**	**1,179**	**1,211**
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	2	0
Georgia	0	0	0	0	0	0	0
Maryland	0	0	1	0	0	0	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	0	8	1	0	26	29	18
West Virginia	443	686	695	553	556	1,148	1,193
East South Central	**164**	**275**	**195**	**132**	**218**	**326**	**406**
Alabama	0	0	0	5	26	58	80
Kentucky	162	264	177	111	123	127	141
Mississippi	1	9	15	12	31	69	51
Tennessee	1	2	3	4	38	72	134
West South Central	**1,254**	**1,484**	**2,478**	**1,670**	**3,611**	**6,152**	**6,979**
Arkansas	10	36	44	36	23	67	82
Louisiana	282	282	542	539	815	1,286	1,520
Oklahoma	359	434	549	321	638	1,507	1,768
Texas	603	732	1,343	774	2,135	3,292	3,609
Mountain	**722**	**577**	**451**	**335**	**1,193**	**1,561**	**1,793**
Arizona	1	1	0	0	0	0	0
Colorado	84	116	53	47	300	328	399
Idaho	1	0	0	0	0	0	0
Montana	16	8	10	74	279	153	247
Nevada	0	0	0	0	0	0	0
New Mexico	564	374	303	159	517	818	820
Utah	10	23	27	10	19	91	103
Wyoming	46	55	58	45	78	171	224
Pacific	**64**	**117**	**75**	**61**	**50**	**72**	**54**
Alaska	0	3	13	5	4	4	4
California	64	114	62	56	46	68	45
Hawaii	0	0	0	0	0	0	0
Oregon	0	0	0	0	0	0	5
Washington	0	0	0	0	0	0	0
Federal Waters	**0**	**0**	**0**	**0**	**0**	**2**	**0**

a. Includes condensate wells for all years except 1960.
b. Nebraska included in Missouri.
Source: American Petroleum Institute, *Quarterly Review of Drilling Statistics*.

TABLE 27
NEW-FIELD WILDCAT WELLS DRILLED AND PROPORTION SUCCESSFUL, 1955-1979

Year	Total Drilled	Dry	Productive	Percent Productive
1955	8,104	7,186	918	11.3
1956	8,709	7,841	868	10.0
1957	8,014	7,142	872	10.9
1958	6,950	6,164	786	11.3
1959	7,031	6,259	772	11.0
1960	7,320	6,575	745	10.2
1961	6,909	6,164	745	10.8
1962	6,794	6,007	787	11.6
1963	6,570	5,801	769	11.7
1964	6,632	5,931	701	10.6
1965	6,182	5,544	638	10.3
1966	6,158	5,523	635	10.3
1967	5,271	4,727	544	10.3
1968	5,205	4,763	442	8.5
1969	5,956	5,421	535	9.0
1970	5,069	4,576	493	9.7
1971	4,463	4,027	436	9.7
1972	5,086	4,520	566	11.1
1973	4,989	4,288	701	14.1
1974	5,652	4,847	805	14.2
1975	6,104	5,228	876	14.4
1976	5,840	4,854	986	16.9
1977	6,101	5,097	1,004	16.5
1978	6,505	5,522	983	15.1
1979	6,413	5,251	1,162	18.1

Source: American Petroleum Institute. *Quarterly Review of Drilling Statistics.*

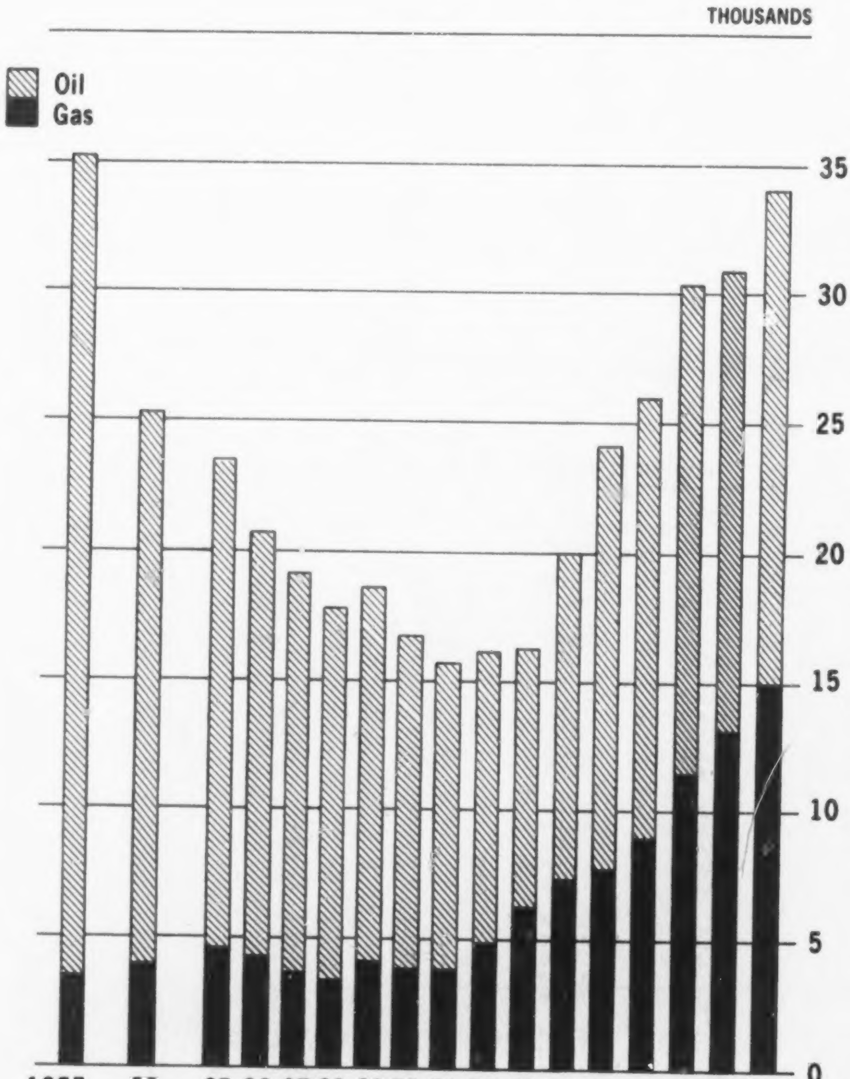
TABLE 28
NEW WELL COMPLETIONS, BY TYPE OF WELL, 1955-1979

Year	Total	Oil	Condensate	Gas	Service[a]	Dry
1955	56,682	31,567	b	3,613	760	20,742
1956	58,160	30,730	428	4,115	1,049	21,838
1957	55,024	28,012	688	3,932	1,409	20,983
1958	50,039	24,578	1,125	3,678	1,615	19,043
1959	51,764	25,800	1,255	3,774	1,670	19,265
1960	46,751	21,186	1,306	3,952	2,733	17,574
1961	46,962	21,101	749	4,915	3,091	17,106
1962	46,179	21,249	123	5,725	2,400	16,682
1963	43,653	20,288	b	4,751	2,267	16,347
1964	45,236	20,620	b	4,855	2,273	17,488
1965	41,432	18,761	b	4,724	1,922	16,025
1966	37,881	16,447	b	4,167	1,497	15,770
1967	33,630	15,329	b	3,659	1,396	13,246
1968	32,038	14,331	b	3,456	1,439	12,812
1969	33,677	14,368	b	4,083	1,490	13,736
1970	29,341	13,020	b	3,840	1,221	11,260
1971	27,250	11,858	b	3,830	1,399	10,163
1972	28,725	11,306	b	4,928	1,434	11,057
1973	27,551	9,902	b	6,385	959	10,305
1974	32,756	12,784	b	7,240	1,058	11,674
1975	38,732	16,408	b	7,580	1,497	13,247
1976	41,305	17,059	b	9,085	1,540	13,621
1977	46,328	18,912	b	11,378	1,346	14,692
1978	48,434	17,775	b	13,064	1,377	16,218
1979	51,157	19,378	b	14,681	1,387	15,711

a. Excludes stratigraphic and core tests.
b. Included with oil prior to 1956 and with gas after 1962.
Source: *Oil and Gas Journal* prior to 1968. American Petroleum Institute. *Quarterly Review of Drilling Statistics.*

CHART 7

TOTAL GAS AND OIL NEW WELL COMPLETIONS



REFERENCE: TABLE 28

TABLE 29
NEW WELL COMPLETIONS, BY TYPE OF WELL AND STATE, 1979

Division and State	Total	Oil	Gas	Service*	Dry
United States	**51,157**	**19,378**	**14,681**	**1,387**	**15,711**
New England	**0**	**0**	**0**	**0**	**0**
Connecticut	0	0	0	0	0
Maine	0	0	0	0	0
Massachusetts	0	0	0	0	0
New Hampshire	0	0	0	0	0
Rhode Island	0	0	0	0	0
Vermont	0	0	0	0	0
Middle Atlantic	**2,369**	**856**	**1,346**	**95**	**72**
New Jersey	0	0	0	0	0
New York	428	94	302	11	21
Pennsylvania	1,941	762	1,044	84	51
East North Central	**5,727**	**2,398**	**2,088**	**106**	**1,135**
Illinois	1,208	647	16	78	467
Indiana	500	232	28	9	231
Michigan	527	169	60	19	279
Ohio	3,492	1,350	1,984	0	158
Wisconsin	0	0	0	0	0
West North Central	**5,250**	**1,902**	**804**	**86**	**2,458**
Iowa	0	0	0	0	0
Kansas	4,306	1,499	748	70	1,989
Minnesota	0	0	0	0	0
Missouri	81	41	4	16	20
Nebraska	449	143	25	0	281
North Dakota	364	208	19	0	137
South Dakota	50	11	8	0	31
South Atlantic	**1,549**	**113**	**1,211**	**47**	**178**
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	41	17	0	4	20
Georgia	0	0	0	0	0
Maryland	9	0	0	9	0
North Carolina	0	0	0	0	0
South Carolina	0	0	0	0	0
Virginia	25	2	18	0	5
West Virginia	1,474	94	1,193	34	153
East South Central	**1,970**	**478**	**406**	**76**	**1,010**
Alabama	214	11	80	0	123
Kentucky	985	308	141	47	489
Mississippi	544	113	51	29	351
Tennessee	227	46	134	0	47
West South Central	**27,059**	**10,576**	**6,979**	**574**	**8,930**
Arkansas	505	186	82	6	231
Louisiana	4,078	913	1,520	38	1,607
Oklahoma	6,362	2,712	1,768	15	1,867
Texas	16,114	6,765	3,609	515	5,225
Mountain	**5,008**	**1,502**	**1,793**	**84**	**1,629**
Arizona	8	6	0	0	2
Colorado	1,036	193	399	7	437
Idaho	2	0	0	0	2
Montana	750	143	247	1	359
Nevada	16	5	0	2	9
New Mexico	1,607	496	820	48	243
Utah	255	58	103	1	93
Wyoming	1,334	601	224	25	484
Pacific	**2,225**	**1,553**	**54**	**319**	**299**
Alaska	72	48	4	7	13
California	2,132	1,505	45	312	270
Hawaii	0	0	0	0	0
Oregon	21	0	5	0	16
Washington	0	0	0	0	0

* Excludes stratigraphic and core tests.

Source: American Petroleum Institute, *Quarterly Review of Drilling Statistics.*

TABLE 30
HOLES DRILLED AND PROPORTION SUCCESSFUL, BY TYPE OF EXPLORATORY HOLE, 1955-1979

	Outposts-Extensions	New-Pool Wildcats	Deeper-Pool Tests	Shallower-Pool Tests	New-Field Wildcats	Total
1955						
Drilled	3,204	2,931	465	233	8,104	14,937
Dry	2,086	2,219	279	62	7,186	11,832
Productive	1,118	712	186	171	918	3,105
Percent Productive	34.9	24.3	40.0	73.4	11.3	20.8
1960						
Drilled	2,431	1,342	495	116	7,320	11,704
Dry	1,603	1,000	309	28	6,575	9,515
Productive	828	342	186	88	745	2,189
Percent Productive	34.1	25.5	37.6	75.9	10.2	18.7
1965						
Drilled	1,131	1,707	353	93	6,182	9,466
Dry	805	1,374	242	40	5,544	8,005
Productive	326	333	111	53	638	1,461
Percent Productive	28.8	19.5	31.4	57.0	10.3	15.4
1970						
Drilled	1,228	1,043	260	93	5,069	7,693
Dry	832	808	167	39	4,576	6,422
Productive	396	235	93	54	493	1,271
Percent Productive	32.2	22.5	35.8	58.1	9.7	16.5
1971						
Drilled	997	1,131	235	97	4,462	6,922
Dry	688	927	160	31	4,028	5,834
Productive	309	204	75	66	434	1,088
Percent Productive	31.0	18.0	31.9	68.0	9.7	15.7
1972						
Drilled	1,042	1,053	245	113	5,086	7,539
Dry	693	828	159	54	4,520	6,254
Productive	349	225	86	59	566	1,285
Percent Productive	33.5	21.4	35.1	52.2	11.1	17.0
1973						
Drilled	1,164	972	255	86	4,989	7,466
Dry	774	683	170	32	4,288	5,947
Productive	390	289	85	54	701	1,519
Percent Productive	33.5	29.7	33.3	62.8	14.1	20.4
1974						
Drilled	1,498	1,047	321	101	5,652	8,619
Dry	829	748	153	33	4,847	6,610
Productive	669	299	168	68	805	2,009
Percent Productive	44.7	28.6	52.3	67.3	14.2	23.3
1975						
Drilled	1,577	1,112	288	133	6,104	9,214
Dry	905	719	181	38	5,228	7,071
Productive	672	393	107	95	876	2,143
Percent Productive	42.6	35.3	37.2	71.4	14.4	23.3
1976						
Drilled	1,718	1,249	264	163	5,840	9,234
Dry	942	790	159	40	4,854	6,785
Productive	776	459	105	123	986	2,449
Percent Productive	45.2	36.7	39.8	75.5	16.9	26.5
1977						
Drilled	1,914	1,376	366	204	6,101	9,961
Dry	1,040	870	236	32	5,097	7,275
Productive	874	506	130	172	1,004	2,686
Percent Productive	45.7	36.8	35.5	84.3	16.5	27.0
1978						
Drilled	2,024	1,549	380	219	6,505	10,677
Dry	1,180	958	247	42	5,522	7,949
Productive	844	591	133	177	983	2,728
Percent Productive	41.7	38.2	35.0	80.8	15.1	25.6
1979						
Drilled	1,853	1,486	486	246	6,374	10,445
Dry	1,003	841	304	61	5,212	7,421
Productive	850	645	182	185	1,162	3,024
Percent Productive	45.9	43.4	37.5	75.2	18.2	29.0

Source: Committee on Statistics of Drilling, *American Association of Petroleum Geologists Bulletin*.

TABLE 31
WELLS AND DRY HOLES DRILLED AS EXPLORATORY TESTS, BY STATE AND TYPE OF WELL, 1979

Division and State	Total Drilled	Dry Holes	Producers Total	Producers Oil	Producers Gas
United States	**10,445**	**7,421**	**3,024**	**1,240**	**1,784**
New England	**0**	**0**	**0**	**0**	**0**
Connecticut	0	0	0	0	0
Maine	0	0	0	0	0
Massachusetts	0	0	0	0	0
New Hampshire	0	0	0	0	0
Rhode Island	0	0	0	0	0
Vermont	0	0	0	0	0
Middle Atlantic	**119**	**26**	**93**	**3**	**90**
New Jersey	0	0	0	0	0
New York	51	11	40	1	39
Pennsylvania	68	15	53	2	51
East North Central	**790**	**528**	**262**	**144**	**118**
Illinois	233	183	50	49	1
Indiana	186	144	42	32	10
Michigan	246	178	68	41	27
Ohio	125	23	102	22	80
Wisconsin	0	0	0	0	0
West North Central	**1,529**	**1,188**	**341**	**221**	**120**
Iowa	0	0	0	0	0
Kansas	1,078	846	232	140	92
Minnesota	0	0	0	0	0
Missouri	15	9	6	4	2
Nebraska	258	201	57	34	23
North Dakota	144	102	42	40	2
South Dakota	34	30	4	3	1
South Atlantic	**127**	**38**	**89**	**5**	**84**
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	15	12	3	3	0
Georgia	0	0	0	0	0
Maryland	0	0	0	0	0
North Carolina	0	0	0	0	0
South Carolina	0	0	0	0	0
Virginia	4	1	3	0	3
West Virginia	108	25	83	2	81
East South Central	**789**	**575**	**214**	**92**	**122**
Alabama	97	70	27	3	24
Kentucky	354	266	88	48	40
Mississippi	244	210	34	23	11
Tennessee	94	29	65	18	47
West South Central	**5,278**	**3,768**	**1,510**	**530**	**980**
Arkansas	105	94	11	8	3
Louisiana	678	601	77	23	54
Oklahoma	484	295	189	85	104
Texas	4,011	2,778	1,233	414	819
Mountain	**1,417**	**1,057**	**360**	**133**	**227**
Arizona	2	2	0	0	0
Colorado	439	346	93	19	74
Idaho	2	2	0	0	0
Montana	298	225	73	41	32
Nevada	10	9	1	1	0
New Mexico	201	118	83	22	61
Utah	86	66	20	8	12
Wyoming	379	289	90	42	48
Pacific	**396**	**241**	**155**	**112**	**43**
Alaska	16	13	3	1	2
California	363	215	148	111	37
Hawaii	0	0	0	0	0
Oregon	17	13	4	0	4
Washington	0	0	0	0	0

Source: American Petroleum Institute. *Quarterly Review of Drilling Statistics.*

TABLE 32
DRILLING OPERATIONS AND EXPENDITURES, BY TYPE OF WELL, 1977-1978[a]

	Total	Oil	Gas[b]	Dry
		1977		
Wells drilled	43,826	18,077	11,479	14,270
Footage drilled (000)	212,694	74,660	62,513	75,521
Expenditures (000)	$ 9,956,453	$3,072,755	$3,599,099	$3,284,600
Average depth per well (ft)	4,853	4,130	5,445	5,292
Average cost per well	$ 227,181	$ 169,981	$ 313,537	$ 230,175
Average cost per foot	$ 46.81	$ 41.15	$ 57.58	$ 43.49
		1978		
Wells drilled	46,655	17,790	13,306	15,559
Footage drilled (000)	230,619	74,411	72,819	83,389
Expenditures (000)	$13,061,090	$3,700,025	$4,978,822	$4,382,243
Average depth per well (ft)	4,943	4,183	5,473	5,360
Average cost per well	$ 279,950	$ 207,983	$ 374,179	$ 281,653
Average cost per foot	$ 56.63	$ 49.72	$ 68.37	$ 52.55

a. Includes all charges for drilling and equipping wells up to and including the "Christmas" trees, but excludes exploration, development and production costs and expenditures for service wells.
b. Includes condensate wells.
Source: American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil & Gas Association, *Joint Association Survey of Industry Drilling Costs*.

TABLE 33
OFF SHORE DRILLING OPERATIONS AND EXPENDITURES, BY TYPE OF WELL, 1977-1978[a]

	Total	Oil	Gas[b]	Dry
		1977		
Wells drilled	1,217	288	393	536
Footage drilled (000)	11,520	2,570	3,722	5,227
Expenditures (000)	$2,055,913	$ 418,725	$ 674,579	$ 962,609
Average depth per well (ft)	9,465	8,924	9,471	9,752
Average cost per well	$1,689,328	$1,453,905	$1,716,485	$1,795,913
Average cost per foot	$ 178.48	$ 162.92	$ 181.23	$ 184.16
		1978		
Wells drilled	1,197	298	419	480
Footage drilled (000)	11,757	2,815	4,209	4,733
Expenditures (000)	$2,577,283	$ 542,971	$ 982,577	$1,051,734
Average depth per well (ft)	9,822	9,446	10,045	9,860
Average cost per well	$2,153,119	$1,822,050	$2,345,053	$2,191,113
Average cost per foot	$ 219.21	$ 192.88	$ 233.45	$ 222.21

a. Includes all charges for drilling and equipping wells up to and including the "Christmas" trees, but excludes exploration, development and production costs and expenditures for service wells.
b. Includes condensate wells.
Source: American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil & Gas Association, *Joint Association Survey of the U.S. Oil and Gas Producing Industry*.

TABLE 34
AVERAGE COST PER FOOT BY TYPE OF WELL, BY DEPTH CLASSES, 1974-1978*

Depth Range (in feet)	Total	Oil	Gas	Dry
		1974		
0- 1,249	$ 17.51	$ 18.55	$ 21.01	$ 13.62
1,250- 2,499	17.05	18.58	19.42	13.09
2,500- 3,749	16.89	19.55	18.07	12.83
3,750- 4,999	16.67	20.62	17.82	12.98
5,000- 7,499	21.73	23.82	22.30	19.59
7,500- 9,999	29.47	30.38	30.52	28.11
10,000-12,499	39.35	44.12	45.67	33.74
12,500-14,999	58.16	61.94	61.78	53.75
15,000-17,499	74.84	72.92	86.51	67.72
17,500-19,999	98.78	110.10	94.33	99.96
20,000 and over	121.12	141.09	111.47	132.05
		1975		
0- 1,249	$ 22.00	$ 23.60	$ 25.70	$ 16.08
1,250- 2,499	19.85	21.62	23.19	14.98
2,500- 3,749	21.06	24.04	23.80	14.83
3,750- 4,999	20.99	26.12	23.20	14.98
5,000- 7,499	27.69	31.51	30.15	22.32
7,500- 9,999	38.91	38.03	42.95	37.01
10,000-12,499	55.93	58.18	63.98	49.59
12,500-14,999	74.48	73.71	82.22	68.25
15,000-17,499	100.38	110.35	114.14	87.48
17,500-19,999	126.50	144.87	128.65	121.16
20,000 and over	143.81	161.67	132.39	154.70
		1976		
0- 1,249	$ 22.84	$ 24.84	$ 28.80	$ 15.52
1,250- 2,499	21.26	23.58	22.65	16.07
2,500- 3,749	22.90	26.09	26.25	16.02
3,750- 4,999	22.04	26.74	23.83	16.14
5,000- 7,499	29.40	32.79	32.65	23.36
7,500- 9,999	42.89	43.08	46.46	40.29
10,000-12,499	64.29	68.56	70.01	57.47
12,500-14,999	86.00	92.47	90.91	79.23
15,000-17,499	108.36	126.25	116.91	96.68
17,500-19,999	129.90	136.54	134.79	122.48
20,000 and over	183.61	163.43	188.01	178.77
		1977		
0- 1,249	$ 26.14	$ 26.79	$ 28.23	$ 23..35
1,250- 2,499	23.66	26.00	25.11	18.07
2,500- 3,749	24.69	26.94	29.81	17.00
3,750- 4,999	24.79	29.10	27.73	18.57
5,000- 7,499	33.13	36.01	38.79	25.56
7,500- 9,999	51.18	49.14	58.30	47.56
10,000-12,499	72.03	76.01	81.56	61..30
12,500-14,999	104.56	98.39	107.58	104.19
15,000-17,499	131.14	154.72	134.41	122..30
17,500-19,999	148.16	142.85	156.90	139.24
20,000 and over	193 26	186.16	190.92	197.42
		1978		
0- 1,249	$ 27.92	$ 30.22	$ 26.00	$ 23.65
1,250- 2,499	28.02	30.20	30.53	22.07
2,500- 3,749	28.08	30.75	33..32	19.65
3,750- 4,999	28.54	33.24	32.46	20.80
5,000- 7,499	37.86	42.16	42.49	30.01
7,500- 9,999	59.33	56.16	72.68	51.69
10,000-12,499	91.15	96.61	98.09	81.98
12,500-14,999	118.11	122..35	128.22	107.50
15,000-17,499	150.87	179.18	153.74	140.37
17,500-19,999	195.17	259.96	179.93	201.69
20,000 and over	247.14	184.73	268.66	226..39

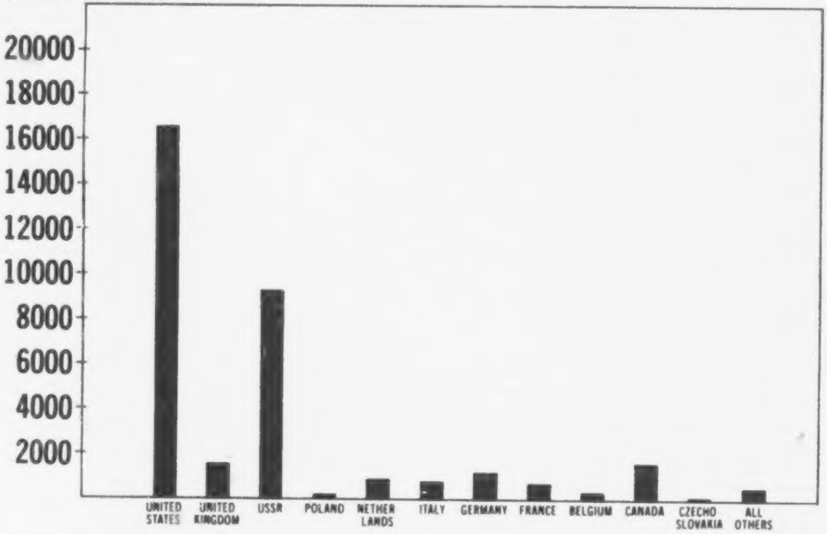
*Includes all charges for drilling and equipment wells up to and including the "Christmas" trees but excludes exploration, development and production costs and expenditures for service wells.

Source: American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil & Gas Association, *Joint Association Survey of Industry Drilling Costs*.

Chart 8

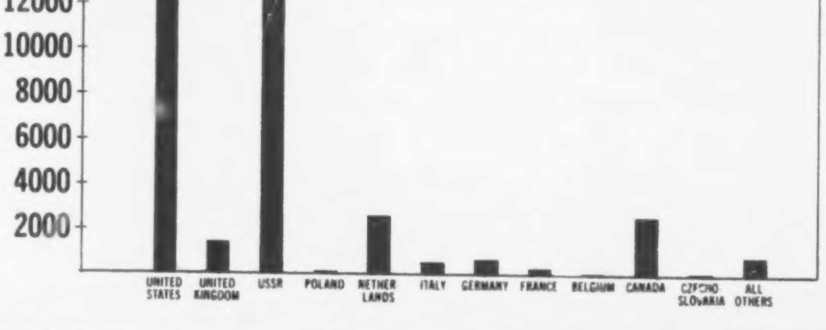
WORLD NATURAL GAS DIRECT FUEL USE* 1978

(TRILLIONS OF BTU)



WORLD NATURAL GAS PRODUCTION 1978

(TRILLIONS OF BTU)



*SEE TABLE 35 FOR DEFINITION

TABLE 35
WORLD NATURAL GAS STATISTICS
1978

Country	Production	Imports	Exports	Direct Fuel Use[a]	Residential Consumers (000)	Miles of Pipeline (000)
	(Trillions of Btu)					
United States[b]	20,446	986	54	16,739	42,183	1,013
United Kingdom	1,440	189	—	1,583	14,396	138
USSR	12,345	389[c]	1,016[c]	9,380	50,924	150
Poland	231	86	—	202	3,418	18[c]
Netherlands	2,664	53	1,423	872	4,210	54
Italy	499	514	—	784	7,250	42
Germany	795	1,282	14	1,272	10,768	102
France	291	611	6	794	8,068	64
Belgium	1	393	17	295	1,719	17
Canada	2,766	—	881	1,659	2,235[c]	75[c]
Czechoslovakia	38	185	—	145	4,269	14
Others	949	275	569	419	4,965	26

a. Does not include supplies for production of electric energy; for cracking, reforming and mixing processes; for raw material; for manufacturing of non-energy products.
b. Does not cross-check with other data in this publication due to different source.
c. 1977.
Source: Annual Bulletin of Gas Statistics for Europe, United Nations.

TABLE 36
WORLD WELL COMPLETIONS
1978

Area	Total	Producing	Total Footage (000 ft.)	Total Wildcats	Discoveries
North America	55,683	36,035	256,691	13,821	4,439
South America	2,635	2,166	18,431	412	150
Far East	883	683	3,793	332	12
Europe	659	388	5,938	297	63
Middle East	585	361	4,211	122	19
North Africa	332	184	2,702	87	22
Other Africa	252	171	2,085	114	48
Oceania	93	25	676	63	2
World Total	61,122	40,013	294,527	15,248	4,755

Source: *Oil & Gas Journal*, December 31, 1979.

SECTION IV
UNDERGROUND GAS STORAGE

	1979	% Change 79/78
Number of Pools	399	+2.8
Est. Ultimate Capacity (Millions of cubic feet)	7,437,000	+1.5
Input to Storage (Millions of cubic feet)	2,285,016	+0.6
Output from Storage (Millions of cubic feet)	2,057,019	−4.4
Maximum Day Output (Millions of cubic feet)	37,555	−4.6

TABLE 37

NUMBER OF UNDERGROUND STORAGE POOLS AND ULTIMATE CAPACITY IN THE UNITED STATES, 1955-1979

Year	Number of Pools	Number of States	Est. Ultimate Capacity (bill. cu. ft.)*
1955	178	18	2,084
1960	217	20	2,854
1965	293	24	4,086
1966	303	25	4,421
1967	308	25	4,520
1968	315	26	4,783
1969	320	26	4,927
1970	325	26	5,178
1971	333	26	5,575
1972	348	26	6,040
1973	355	26	6,279
1974	367	26	6,360
1975	376	26	6,644
1976	386	26	6,927
1977	385	26	7,223
1978	388	26	7,330
1979	399	26	7,437

*At 14.73 psia and 60°F.

Source: A.G.A. *The Underground Storage of Gas in the United States and Canada.*

UNDERGROUND STORAGE

TABLE 38

NUMBER OF AQUIFER POOLS AND ULTIMATE CAPACITY IN THE UNITED STATES, 1955-1979[a]

Year	Number of Pools	Number of States	Est. Ultimate Capacity (bill. cu. ft.)[b]
1955	5	4	c
1960	14	8	c
1965	37	9	643
1966	37	9	647
1967	37	9	672
1968	40	10	759
1969	43	10	818
1970	43	9	968
1971	44	8	1,056
1972	46	9	1,278
1973	49	10	1,399
1974	51	10	1,408
1975	52	10	1,459
1976	52	10	1,484
1977	52	10	1,578
1978	53	10	1,593
1979	54	10	1,601

a. These data are also included in Table 37. b. At 14.73 psia and 60°F. c. Not available. Source: Same as Table 36.

TABLE 39

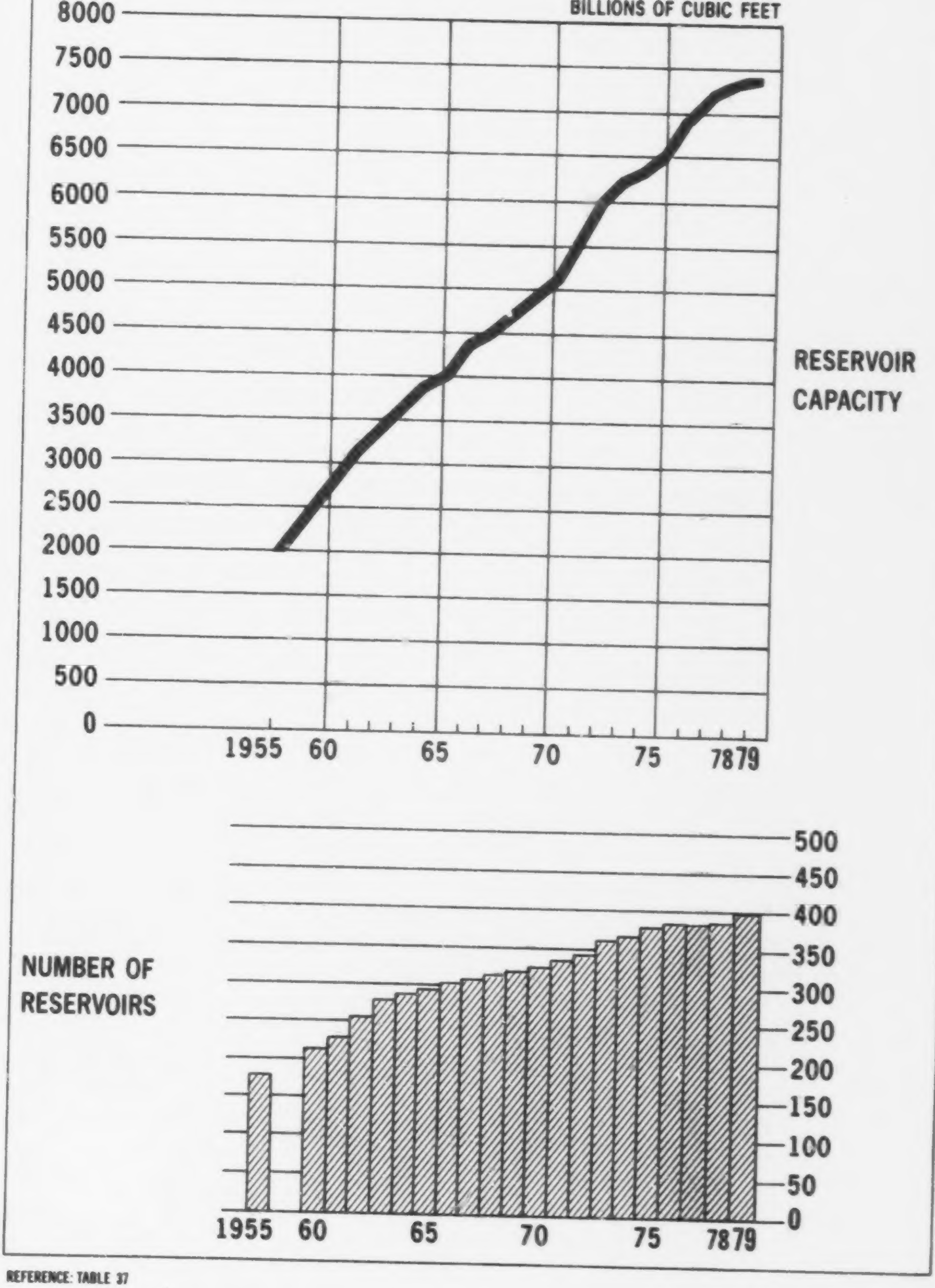
LIQUEFIED NATURAL GAS STORAGE OPERATIONS IN THE UNITED STATES AS OF DECEMBER 31, 1979

	Presently Operating	Proposed or Pending Operation
Complete Plants		
Storage Capacity—MMcf	59.625	6.000
Gross Liquefication Capacity—MMcf/day	305	38
Sendout Capacity—MMcf/day	7,737	1,057
Number of Facilities	51	4
Satellite Plants		
Strage Capacity—MMcf	6,976	a
Sendout Capacity—MMcf/day	956	a
Number of Facilities	51	a
Import Terminals[b]		
Storage Capacity—MMcf	18.250	25,383
Sendout Capacity—MMcf/day	2.550	4,074
Number of Facilities	4	4

a. All plants presently operating.
b. Of those presently operating. Algonquin terminal has been utilized for domestic storage since 1973.
Source: *Pipeline and Gas Journal.*

CHART 9

NUMBER AND CAPACITY OF EXISTING UNDERGROUND STORAGE RESERVOIRS



REFERENCE: TABLE 37

UNDERGROUND STORAGE

TABLE 40
INPUTS, OUTPUTS, AND GAS IN UNDERGROUND STORAGE, BY STATE, 1979

(Millions of cubic feet—14.73 psia at 60°F.)

	Year Ending December 31, 1979					
Division and State	Input to Storage	Output from Storage	Native Gas	Stored Gas	Maximum Stored Gas	Maximum Day Output
United States	**2,285,016**	**2,057,019**	**1,055,966**	**5,036,559**	**5,459,523**	**37,555**
New England	**0**	**0**	**0**	**0**	**0**	**0**
Connecticut	0	0	0	0	0	0
Maine	0	0	0	0	0	0
Massachusetts	0	0	0	0	0	0
New Hampshire	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0
Vermont	0	0	0	0	0	0
Middle Atlantic	**403,673**	**373,294**	**44,177**	**756,125**	**806,054**	**6,130**
New Jersey	0	0	0	0	0	0
New York	46,439	40,110	15,524	115,436	119,341	715
Pennsylvania	357,234	333,184	28,653	640,689	686,713	5,415
East North Central	**897,924**	**777,967**	**375,461**	**1,887,641**	**2,036,266**	**12,955**
Illinois	253,320	209,924	11,508	829,864	849,053	4,376
Indiana	27,177	23,709	20,622	92,302	94,026	489
Michigan	424,176	364,649	257,989	566,159	648,145	5,190
Ohio	193,251	179,685	85,342	399,316	445,042	2,900
Wisconsin	0	0	0	0	0	0
West North Central	**150,025**	**124,348**	**42,976**	**427,534**	**453,276**	**1,826**
Iowa	70,967	61,018	0	231,989	245,494	803
Kansas	59,148	52,028	19,984	110,396	122,276	851
Minnesota	987	668	0	4,601	4,687	43
Missouri	8,836	7,583	0	29,354	29,354	—
Nebraska	10,087	3,051	22,992	51,194	51,465	129
North Dakota	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0
South Atlantic	**192,775**	**178,767**	**65,868**	**447,622**	**464,956**	**3,620**
Delaware	0	0	0	0	0	0
Dist. of Columbia	0	0	0	0	0	0
Florida	0	0	0	0	0	0
Georgia	0	0	0	0	0	0
Maryland	19,715	19,448	32,456	27,671	29,522	1,017
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	0	0	0	0	0	0
West Virginia	173,060	159,319	33,412	419,951	435,434	2,603
East South Central	**129,558**	**130,428**	**105,552**	**188,396**	**279,415**	**2,406**
Alabama	0	0	0	0	0	0
Kentucky	68,961	63,328	78,229	117,854	197,703	1,174
Mississippi	60,597	67,100	27,323	70,542	81,712	1,232
Tennessee	0	0	0	0	0	0
West South Central	**335,193**	**317,081**	**180,625**	**802,344**	**865,216**	**4,827**
Arkansas	2,081	2,693	23,674	12,653	12,853	70
Louisiana	140,433	141,487	58,199	303,174	331,698	2,105
Oklahoma	110,354	103,983	25,662	266,951	289,280	1,726
Texas	82,325	68,918	73,090	219,566	231,385	926
Mountain	**61,013**	**53,808**	**88,213**	**220,317**	**235,199**	**1,012**
Arizona	0	0	0	0	0	0
Colorado	25,334	21,193	16,008	30,722	34,489	533
Idaho	0	0	0	0	0	0
Montana	23,254	15,497	46,938	128,225	129,109	187
Nevada	0	0	0	0	0	0
New Mexico	39	7,687	11,700	13,783	21,439	84
Utah	1,193	966	0	4,510	4,664	20
Wyoming	11,193	8,465	13,567	43,077	45,498	188
Pacific	**114,854**	**101,329**	**153,093**	**306,577**	**319,143**	**4,780**
Alaska	0	0	0	0	0	0
California	100,522	88,924	153,093	276,689	286,936	4,492
Hawaii	0	0	0	0	0	0
Oregon	0	0	0	0	0	0
Washington	14,332	12,405	0	29,888	32,207	288

Source: Same as Table 37.

UNDERGROUND STORAGE

TABLE 41

NUMBER OF POOLS, WELLS, COMPRESSOR STATIONS, AND HORSEPOWER IN UNDERGROUND STORAGE FIELDS, BY STATE, 1977-1979

Divison and State	Number of Pools			Number of Active Wells		
	1977	1978	1979	1977	1978	1979
(1) **United States**	**385**	**388**	**399**	**16,928**	**17,297**	**17,605**
(2) **New England**	**0**	**0**	**0**	**0**	**0**	**0**
(3) **Middle Atlantic**	**86**	**86**	**95**	**2,855**	**2,821**	**3,012**
(4) New Jersey	0	0	0	0	0	0
(5) New York	19	19	20	763	762	928
(6) Pennsylvania	67	67	75	2,092	2,059	2,084
(7) **East North Central**	**126**	**127**	**128**	**8,437**	**8,640**	**8,725**
(8) Illinois	31	31	33	1,669	1,717	1,724
(9) Indiana	27	28	30	902	928	951
(10) Michigan	45	45	42	2,731	2,830	2,867
(11) Ohio	23	23	23	3,135	3,165	3,183
(12) Wisconsin	0	0	0	0	0	0
(13) **West North Central**	**29**	**29**	**31**	**1,368**	**1,387**	**1,386**
(14) Iowa	8	8	9	414	424	424
(15) Kansas	17	17	18	780	780	772
(16) Minnesota	1	1	1	46	55	61
(17) Missouri	1	1	1	82	82	82
(18) Nebraska	2	2	2	46	46	47
(19) North Dakota	0	0	0	0	0	0
(20) South Dakota	0	0	0	0	0	0
(21) **South Atlantic**	**39**	**39**	**38**	**1,573**	**1,594**	**1,595**
(22) Delaware	0	0	0	0	0	0
(23) District of Columbia	0	0	0	0	0	0
(24) Florida	0	0	0	0	0	0
(25) Georgia	0	0	0	0	0	0
(26) Maryland	1	1	1	74	77	79
(27) North Carolina	0	0	0	0	0	0
(28) South Carolina	0	0	0	0	0	0
(29) Virginia	0	0	0	0	0	0
(30) West Virginia	38	38	37	1,499	1,517	1,516
(31) **East South Central**	**27**	**27**	**27**	**1,279**	**1,298**	**1,297**
(32) Alabama	0	0	0	0	0	0
(33) Kentucky	23	23	23	1,185	1,201	1,197
(34) Mississippi	4	4	4	94	97	100
(35) Tennessee	0	0	0	0	0	0
(36) **West South Central**	**41**	**43**	**43**	**649**	**751**	**750**
(37) Arkansas	5	5	5	22	22	22
(38) Louisiana	6	6	6	142	193	191
(39) Oklahoma	12	13	14	252	281	281
(40) Texas	18	19	18	233	255	256
(41) **Mountain**	**26**	**26**	**26**	**311**	**329**	**354**
(42) Arizona	0	0	0	0	0	0
(43) Colorado	7	7	8	85	99	122
(44) Idaho	0	0	0	0	0	0
(45) Montana	5	5	5	134	137	137
(46) Nevada	0	0	0	0	0	0
(47) New Mexico	2	2	2	46	46	47
(48) Utah	2	2	2	15	15	15
(49) Wyoming	10	10	9	31	32	33
(50) **Pacific**	**11**	**11**	**11**	**456**	**477**	**486**
(51) Alaska	0	0	0	0	0	0
(52) California	9	9	9	380	400	409
(53) Hawaii	0	0	0	0	0	0
(54) Oregon	0	0	0	0	0	0
(55) Washington	2	2	2	76	77	77

Source: Same as Table 37.

TABLE 41 (Continued)
NUMBER OF POOLS, WELLS, COMPRESSOR STATIONS, AND HORSEPOWER IN UNDERGROUND STORAGE FIELDS, BY STATE, 1977-1979

Number of Compressor Stations			Total HP Installed in Compressor Stations			
1977	1978	1979	1977	1978	1979	
263	**270**	**283**	**1,374,141**	**1,495,712**	**1,864,552**	(1)
0	**0**	**0**	**0**	**0**	**0**	(2)
58	**59**	**62**	**222,470**	**222,410**	**256,670**	(3)
0	0	0	0	0	0	(4)
12	12	13	27,050	27,050	30,450	(5)
46	47	49	195,420	195,360	226,220	(6)
80	**82**	**86**	**592,370**	**616,071**	**883,261**	(7)
28	27	27	203,425	217,435	217,795	(8)
12	15	19	18,210	18,901	19,651	(9)
22	22	22	291,960	300,960	566,480	(10)
18	18	18	78,775	78,775	79,335	(11)
0	0	0	0	0	0	(12)
16	**16**	**18**	**80,820**	**83,130**	**81,810**	(13)
4	4	4	39,000	43,000	41,680	(14)
8	8	10	21,620	19,930	19,930	(15)
1	1	1	2,400	2,400	2,400	(16)
1	1	1	8,850	8,850	8,850	(17)
2	2	2	8,950	8,950	8,950	(18)
0	0	0	0	0	0	(19)
0	0	0	0	0	0	(20)
20	**20**	**22**	**88,760**	**88,760**	**92,760**	(21)
0	0	0	0	0	0	(22)
0	0	0	0	0	0	(23)
0	0	0	0	0	0	(24)
0	0	0	0	0	0	(25)
1	1	1	11,000	11,000	11,000	(26)
0	0	0	0	0	0	(27)
0	0	0	0	0	0	(28)
0	0	0	0	0	0	(29)
19	19	21	77,760	77,760	81,760	(30)
20	**20**	**20**	**71,910**	**72,010**	**72,010**	(31)
0	0	0	0	0	0	(32)
16	17	17	36,110	36,210	36,210	(33)
4	3	3	35,800	35,800	35,800	(34)
0	0	0	0	0	0	(35)
36	**39**	**41**	**159,174**	**227,184**	**227,944**	(36)
5	5	5	1,470	1,470	1,470	(37)
6	6	6	64,400	94,200	93,640	(38)
9	10	10	51,019	71,469	73,219	(39)
16	18	20	42,285	60,045	59,615	(40)
22	**23**	**23**	**61,427**	**58,937**	**62,867**	(41)
0	0	0	0	0	0	(42)
6	6	7	23,995	25,095	29,025	(43)
0	0	0	0	0	0	(44)
5	5	5	22,340	23,150	23,150	(45)
0	0	0	0	0	0	(46)
2	2	1	5,200	800	800	(47)
1	2	2	1,200	1,200	1,200	(48)
8	8	8	8,692	8,692	8,692	(49)
11	**11**	**11**	**97,210**	**127,210**	**127,230**	(50)
0	0	0	0	0	0	(51)
10	10	10	85,410	115,410	115,430	(52)
0	0	0	0	0	0	(53)
0	0	0	0	0	0	(54)
1	1	1	11,800	11,800	11,800	(55)

TABLE 42
ULTIMATE CAPACITY OF EXISTING RESERVOIRS, BY STATE, 1979*

(Millions of cubic feet—14.73 psia at 60°F.)

Division and State	Cushion Gas Native	Cushion Gas Injected	Cushion Gas Total	Working Gas	Ultimate Reservoir Capacity
United States	**1,045,594**	**2,280,806**	**3,326,400**	**2,766,124**	**7,436,818**
New England	**0**	**0**	**0**	**0**	**0**
Connecticut	0	0	0	0	0
Maine	0	0	0	0	0
Massachusetts	0	0	0	0	0
New Hampshire	0	0	0	0	0
Rhode Island	0	0	0	0	0
Vermont	0	0	0	0	0
Middle Atlantic	**44,177**	**371,685**	**415,863**	**384,441**	**908,749**
New Jersey	0	0	0	0	0
New York	15,524	62,946	78,470	52,491	151,139
Pennsylvania	28,653	308,739	337,393	331,950	757,610
East North Central	**367,149**	**983,869**	**1,351,019**	**912,084**	**2,837,018**
Illinois	11,369	516,015	527,384	313,988	1,098,037
Indiana	20,622	56,353	76,975	35,949	172,784
Michigan	249,816	155,076	404,893	419,256	946,234
Ohio	85,342	256,425	341,767	142,891	619,963
Wisconsin	0	0	0	0	0
West North Central	**42,976**	**209,741**	**252,716**	**217,793**	**666,838**
Iowa	0	117,751	117,751	114,238	354,500
Kansas	19,984	73,711	93,694	36,685	154,225
Minnesota	0	3,000	3,000	1,601	20,000
Missouri	0	11,759	11,759	17,595	45,000
Nebraska	22,992	3,520	26,512	47,674	93,113
North Dakota	0	0	0	0	0
South Dakota	0	0	0	0	0
South Atlantic	**65,868**	**241,085**	**306,954**	**206,537**	**573,871**
Delaware	0	0	0	0	0
Dist. of Col.	0	0	0	0	0
Florida	0	0	0	0	0
Georgia	0	0	0	0	0
Maryland	32,456	12,438	44,895	15,233	64,770
North Carolina	0	0	0	0	0
South Carolina	0	0	0	0	0
Virginia	0	0	0	0	0
West Virginia	33,412	228,647	262,059	191,304	509,101
East South Central	**104,550**	**47,104**	**151,654**	**142,294**	**315,366**
Alabama	0	0	0	0	0
Kentucky	77,227	28,337	105,564	90,519	206,003
Mississippi	27,323	18,767	46,090	51,775	109,363
Tennessee	0	0	0	0	0
West South Central	**179,638**	**298,392**	**478,030**	**504,938**	**1,193,399**
Arkansas	23,674	0	23,674	12,653	42,145
Louisiana	58,199	160,131	218,330	143,043	420,814
Oklahoma	25,662	121,378	147,040	145,573	375,471
Texas	72,103	16,883	88,986	203,669	354,969
Mountain	**88,213**	**38,011**	**126,224**	**182,306**	**409,911**
Arizona	0	0	0	0	0
Colorado	16,008	10,588	26,596	20,134	56,420
Idaho	0	0	0	0	0
Montana	46,938	15,200	62,138	113,025	219,612
Nevada	0	0	0	0	0
New Mexico	11,700	6,543	18,243	7,240	34,577
Utah	0	2,740	2,740	1,770	4,714
Wyoming	13,567	2,940	16,507	40,137	94,388
Pacific	**153,022**	**90,918**	**243,940**	**215,730**	**531,665**
Alaska	0	0	0	0	0
California	153,022	70,518	223,540	206,242	499,458
Hawaii	0	0	0	0	0
Oregon	0	0	0	0	0
Washington	0	20,400	20,400	9,488	32,207

*In some states or regions, the difference between the sum of the components and Ultimate Reservoir Capacity represents presently unused capacity.
Source: Same as Table 37.

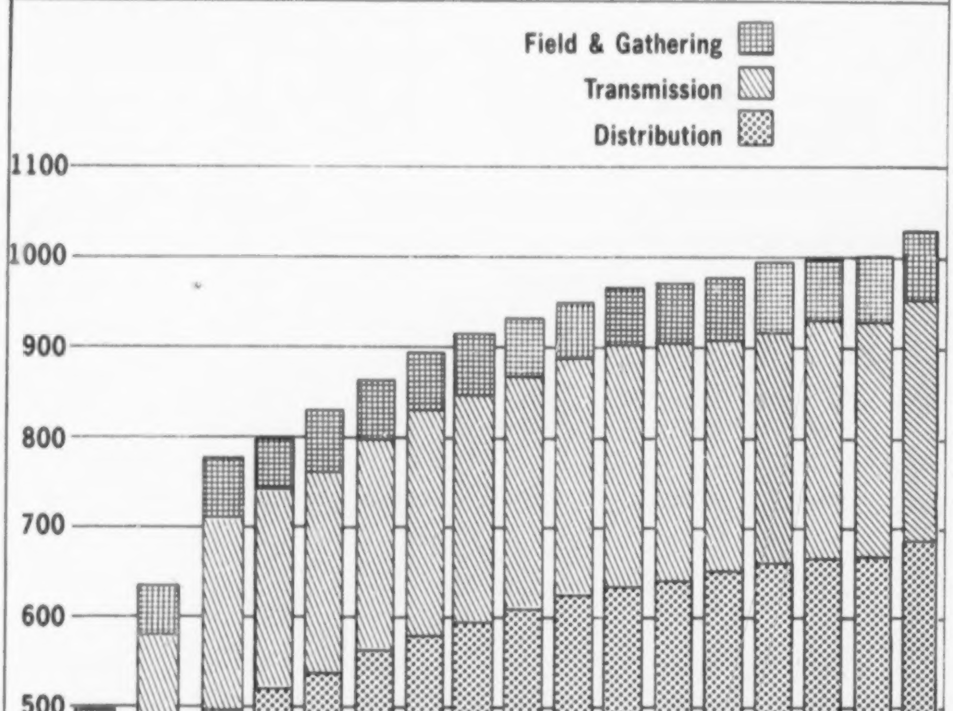
SECTION V
TRANSMISSION AND DISTRIBUTION

	1979	% Change 79/78
Miles of Pipeline (Thousands)		
Total	1,029.8	+1.7
Field & Gathering	77.8	+3.9
Transmission	263.5	+1.1
Distribution	688.5	+1.6
Miles Installed (Thousands)	23.6	+9.8

CHART 10

GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN

THOUSANDS OF MILES



REFERENCE: TABLE 44

TRANSMISSION AND DISTRIBUTION

TABLE 43
GAS UTILITY INDUSTRY INSTALLED COMPRESSOR HORSEPOWER, 1955-1979

(Thousands)

Year	Total	Transmission
1955	5,517	4,350
1956	6,011	4,838
1957	6,633	5,412
1958	6,996	5,612
1959	7,504	6,046
1960	7,843	6,359
1961	8,169	6,696
1962	8,609	7,064
1963	8,818	7,261
1964	9,309	7,546
1965	9,708	7,736
1966	10,242	8,182
1967	10,746	8,596
1968	11,438	9,146
1969	12,742	9,375
1970	13,150	9,692
1971	14,142	10,763
1972	14,506	10,976
1973	14,858	11,272
1974	15,181	11,883*
1975	15,413	12,069
1976	15,472	12,046
1977	15,553	12,105
1978	15,824	12,255
1979	16,030	12,437

*Not comparable to previous years due to reclassification.

TABLE 44
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN, BY TYPE, 1955-1979[a]

(Thousands)

Year	Total	Field and Gathering	Transmission Pipeline[b]	Distribution Main
1955	496.7	45.7	145.9	305.1
1956	525.2	47.6	153.8	323.8
1957	548.8	50.0	160.1	338.7
1958	571.5	52.0	165.4	354.1
1959	599.8	54.1	174.3	371.4
1960	630.9	55.8	183.7	391.4
1961	659.0	56.7	191.9	410.4
1962	683.2	58.7	196.4	428.1
1963	709.9	60.7	200.9	448.3
1964	736.2	61.0	205.4	469.8
1965	767.5	61.7	211.3	494.5
1966	799.6	63.0	217.0	519.6
1967	828.3	63.7	225.4	539.2
1968	861.6	64.4	234.5	562.7
1969	891.6	64.9	248.1	578.6
1970	913.3	66.3	252.2	594.8
1971	931.4	66.2	254.8	610.4
1972	948.1	66.9	258.1	623.1
1973	962.9	65.9	263.1	633.8
1974	974.1	66.4	262.2	645.6
1975	979.3	68.5	262.6	648.2
1976	987.7	70.3	258.2	659.1
1977	998.9	71.5	260.5	666.9
1978	1013.0	74.9	260.6	677.5
1979	1029.8	77.8	263.5	688.5
Steel	891.7	76.9	258.3	556.5
Plastic[c]	72.1	0.3	3.3	68.5
Other	66.0	0.6	2.1	63.2

a. Includes data for Hawaii subsequent to 1959 and for Alaska subsequent to 1960; excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of end of each year.

b. Includes 3.6 thousand miles of Underground Storage pipe in 1971, 3.3 thousand miles in 1972, 3.4 thousand miles in 1973, 4.9 thousand miles in 1974, 5.0 thousand miles in 1975, 5.3 thousand miles in 1976, 5.2 thousand miles in 1977, 6.0 thousand miles in 1978, and 5.7 thousand miles in 1979, some of which was formerly included in Field and Gathering pipe.

c. Includes fiberglass.

TABLE 45
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN, BY TYPE AND BY STATE, 1979[a]

Division and State	Total	Field and Gathering	Transmission Pipeline[b]	Distribution Main
United States	**1,029,727**	**77,766**	**263,481**	**688,480**
New England	**26,923**	**0**	**1,724**	**25,199**
Connecticut	6,066	0	529	5,537
Maine	395	0	80	315
Massachusetts	16,552	0	800	15,752
New Hampshire	1,220	0	202	1,018
Rhode Island	2,355	0	53	2,302
Vermont	335	0	60	275
Middle Atlantic	**114,839**	**6,354**	**16,827**	**91,658**
New Jersey	22,470	0	1,336	21,134
New York	40,528	428	3,690	36,410
Pennsylvania	51,841	5,926	11,801	34,114
East North Central	**196,887**	**4,423**	**36,078**	**156,386**
Illinois	52,553	137	9,764	42,652
Indiana	27,964	248	5,632	22,084
Michigan	42,849	226	7,315	35,308
Ohio	51,917	3,812	10,202	37,903
Wisconsin	21,604	0	3,165	18,439
West North Central	**111,538**	**8,526**	**39,584**	**63,428**
Iowa	17,959	89	5,972	11,898
Kansas	36,233	8,276	15,930	12,027
Minnesota	16,524	0	3,995	12,529
Missouri	21,587	34	4,147	17,406
Nebraska	13,897	32	7,462	6,403
North Dakota	2,769	89	1,133	1,547
South Dakota	2,569	6	945	1,618
South Atlantic	**103,488**	**8,702**	**21,884**	**72,902**
Delaware	1,327	0	227	1,100
District of Columbia	1,154	0	23	1,131
Florida	13,742	19	3,063	10,660
Georgia	24,278	11	5,127	19,140
Maryland	8,628	24	842	7,762
North Carolina	11,575	0	2,270	9,305
South Carolina	9,861	0	2,298	7,563
Virginia	11,088	96	2,432	8,560
West Virginia	21,835	8,552	5,602	7,681
East South Central	**72,614**	**3,903**	**27,095**	**41,616**
Alabama	18,977	0	5,452	13,525
Kentucky	19,831	3,665	6,921	9,245
Mississippi	17,794	236	9,436	8,122
Tennessee	16,012	2	5,286	10,724
West South Central	**208,723**	**27,645**	**81,519**	**99,559**
Arkansas	17,988	889	6,416	10,683
Louisiana	42,481	3,147	23,583	15,751
Oklahoma	36,030	9,173	12,271	14,586
Texas	112,224	14,436	39,249	58,539
Mountain	**94,021**	**17,348**	**27,614**	**49,059**
Arizona	16,423	2	5,061	11,360
Colorado	21,652	2,615	6,039	12,998
Idaho	4,108	9	1,309	2,790
Montana	8,572	2,408	3,102	3,062
Nevada	3,423	5	1,270	2,148
New Mexico	23,688	9,634	6,103	7,951
Utah	7,834	642	952	6,240
Wyoming	8,321	2,033	3,778	2,510
Pacific	**100,694**	**865**	**11,156**	**88,673**
Alaska	1,184	7	211	966
California	78,104	856	7,871	69,377
Hawaii	588	0	0	588
Oregon	9,489	2	1,201	8,286
Washington	11,329	0	1,873	9,456

[a] Excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of end of year.
[b] Includes 5,700 miles of underground storage pipe.

TRANSMISSION AND DISTRIBUTION

TABLE 46
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN, BY STATE, 1955-1979[a]

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	**496,740**	**630,950**	**767,520**	**913,267**	**979,263**	**1,013,076**	**1,029,727**
New England	**17,000**	**19,140**	**22,090**	**25,686**	**26,580**	**26,632**	**26,923**
Connecticut	3,720	4,300	4,960	5,728	5,991	6,028	6,066
Maine	430	390	390	705	461	392	395
Massachusetts	10,570	11,910	13,740	15,609	16,452	16,432	16,552
New Hampshire	540	630	800	1,041	1,093	1,121	1,220
Rhode Island	1,520	1,720	1,990	2,299	2,248	2,324	2,355
Vermont	220	190	210	304	335	335	335
Middle Atlantic	**80,710**	**92,600**	**102,580**	**111,644**	**113,993**	**114,315**	**114,839**
New Jersey	12,420	15,140	18,320	21,052	22,077	22,216	22,470
New York	28,440	33,020	36,580	39,955	40,535	40,626	40,528
Pennsylvania	39,850	44,440	47,680	50,637	51,381	51,473	51,841
East North Central	**90,210**	**113,420**	**147,640**	**178,268**	**190,172**	**194,441**	**196,887**
Illinois	21,250	27,770	38,750	46,683	50,252	51,728	52,553
Indiana	11,840	14,800	20,240	25,264	27,267	27,674	27,964
Michigan	16,810	21,860	30,370	37,699	40,203	42,022	42,849
Ohio	34,180	40,150	44,690	49,393	51,505	51,837	51,917
Wisconsin	6,130	8,840	13,590	19,229	20,945	21,180	21,604
West North Central	**55,200**	**67,640**	**82,250**	**99,536**	**106,134**	**109,408**	**111,538**
Iowa	7,840	9,970	13,630	16,654	17,273	17,461	17,959
Kansas	22,910	25,860	28,780	32,802	34,280	35,499	36,233
Minnesota	5,360	8,090	10,680	14,162	15,264	16,077	16,524
Missouri	9,770	11,950	15,150	18,654	20,897	21,353	21,587
Nebraska	7,320	8,910	10,300	12,627	13,333	13,792	13,897
North Dakota	930	1,100	1,560	2,332	2,533	2,691	2,769
South Dakota	1,070	1,760	2,150	2,305	2,554	2,535	2,569
South Atlantic	**43,260**	**59,100**	**74,180**	**92,738**	**100,496**	**102,284**	**103,488**
Delaware	560	830	1,160	1,270	1,322	1,323	1,327
District of Columbia	1,140	1,160	1,150	1,164	1,163	1,155	1,154
Florida	3,220	6,400	8,330	11,435	13,100	13,623	13,742
Georgia	6,430	10,580	14,600	19,549	22,679	23,687	24,278
Maryland	4,430	5,400	6,710	7,986	8,534	8,604	8,628
North Carolina	2,290	4,830	7,080	10,605	11,100	11,403	11,575
South Carolina	1,350	3,320	6,090	8,514	9,667	9,715	9,861
Virginia	4,750	6,490	8,190	10,451	10,944	11,014	11,088
West Virginia	19,090	20,090	20,870	21,764	21,987	21,760	21,835
East South Central	**33,390**	**44,930**	**54,390**	**65,441**	**70,345**	**72,177**	**72,614**
Alabama	8,220	11,380	13,860	16,607	17,832	18,834	18,977
Kentucky	9,790	13,130	15,470	18,295	19,816	19,771	19,831
Mississippi	9,020	11,420	13,460	16,403	17,056	17,611	17,794
Tennessee	6,360	9,000	11,600	14,136	15,641	15,961	16,012
West South Central	**99,330**	**127,120**	**150,260**	**182,752**	**194,820**	**204,488**	**208,723**
Arkansas	8,700	10,380	13,060	16,429	17,474	17,976	17,988
Louisiana	17,820	24,970	30,310	36,921	38,855	41,641	42,481
Oklahoma	16,080	19,590	23,850	28,532	32,798	35,074	36,030
Texas	56,730	72,180	83,040	100,870	105,693	109,797	112,224
Mountain	**29,630**	**44,940**	**59,000**	**71,848**	**83,184**	**91,282**	**94,021**
Arizona	6,770	9,630	11,120	13,379	15,197	16,463	16,423
Colorado	5,530	8,080	12,240	15,870	19,192	21,055	21,652
Idaho	20	1,490	2,770	3,226	3,785	4,196	4,108
Montana	4,120	5,120	5,970	6,324	7,435	8,320	8,572
Nevada	300	660	1,940	2,470	2,945	3,246	3,423
New Mexico	8,320	13,160	15,410	19,050	21,657	23,195	23,688
Utah	2,160	3,400	4,940	5,609	6,577	7,480	7,834
Wyoming	2,410	3,400	4,610	5,920	6,396	7,327	8,321
Pacific	**48,010**	**62,060**	**75,130**	**85,354**	**93,539**	**98,049**	**100,694**
Alaska	b	c	250	667	868	968	1,184
California	43,070	52,280	60,650	66,328	72,493	76,382	78,104
Hawaii	b	440	490	530	581	582	588
Oregon	2,720	3,940	6,360	8,014	8,838	9,229	9,489
Washington	2,220	5,400	7,380	9,815	10,759	10,888	11,329

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a. Includes field, gathering, underground storage, transmission and distribution main but excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of end of year.

b. Excludes data for Alaska prior to 1959 and Hawaii prior to 1960.

c. Not available.

TABLE 47

GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN INSTALLED DURING 1979, BY TYPE, BY STATE AND BY TYPE OF PIPE[a]

		Field and Gathering	Transmission Pipeline	Distribution Main			
Division and State	Total	Steel	Steel[b]	Total	Steel	Plastic[c]	Other
United States	**23,607**	**3,273**	**3,377**	**16,957**	**7,136**	**9,791**	**30**
New England	**378**	**0**	**80**	**298**	**128**	**170**	**0**
Connecticut	46	0	0	46	13	33	0
Maine	7	0	0	7	0	7	0
Massachusetts	191	0	0	191	87	104	0
New Hampshire	103	0	80	23	13	10	0
Rhode Island	31	0	0	31	15	16	0
Vermont	0	0	0	0	0	0	0
Middle Atlantic	**1,219**	**72**	**83**	**1,064**	**328**	**730**	**6**
New Jersey	396	0	11	385	146	238	1
New York	302	9	0	293	58	234	1
Pennsylvania	521	63	72	386	124	258	4
East North Central	**3,669**	**39**	**256**	**3,374**	**1,368**	**2,006**	**0**
Illinois	1,309	0	32	1,277	960	317	0
Indiana	426	5	41	380	93	287	0
Michigan	998	7	175	816	63	753	0
Ohio	440	27	8	405	225	180	0
Wisconsin	496	0	0	496	27	469	0
West North Central	**1,885**	**333**	**324**	**1,228**	**436**	**791**	**1**
Iowa	229	1	0	228	71	157	0
Kansas	894	306	288	300	163	137	0
Minnesota	344	0	3	341	46	295	0
Missouri	161	0	16	145	64	80	1
Nebraska	130	0	1	129	69	60	0
North Dakota	88	25	16	47	5	42	0
South Dakota	39	1	0	38	18	20	0
South Atlantic	**1,345**	**46**	**78**	**1,221**	**1,077**	**143**	**1**
Delaware	8	0	0	8	5	3	0
Dist. of Columbia	11	0	0	11	4	7	0
Florida	120	0	0	120	118	2	0
Georgia	602	0	23	579	566	13	0
Maryland	46	0	3	43	18	25	0
North Carolina	153	0	0	153	152	1	0
South Carolina	179	0	0	179	177	2	0
Virginia	84	0	19	65	13	51	1
West Virginia	142	46	33	63	24	39	0
East South Central	**872**	**37**	**127**	**708**	**413**	**295**	**0**
Alabama	267	0	33	234	86	148	0
Kentucky	70	9	7	54	46	8	0
Mississippi	216	28	87	101	35	66	0
Tennessee	319	0	0	319	246	73	0
West South Central	**5,126**	**1,510**	**1,464**	**2,152**	**605**	**1,525**	**22**
Arkansas	20	0	5	15	1	14	
Louisiana	978	164	577	237	130	107	0
Oklahoma	1,109	620	121	368	12	356	0
Texas	3,019	726	761	1,532	462	1,048	22
Mountain	**6,083**	**1,209**	**715**	**4,159**	**1,992**	**2,167**	**0**
Arizona	2,621	0	0	2,621	1,520	1,101	0
Colorado	922	249	45	628	257	371	0
Idaho	89	0	6	83	8	75	0
Montana	258	120	55	83	8	75	0
Nevada	177	2	10	165	46	119	0
New Mexico	582	331	81	170	150	20	0
Utah	436	43	29	364	0	364	0
Wyoming	998	464	489	45	3	42	0
Pacific	**3,030**	**27**	**250**	**2,753**	**789**	**1,964**	**0**
Alaska	216	7	13	196	196	0	0
California	2,035	18	39	1,978	191	1,787	0
Hawaii	10	0	0	10	10	0	0
Oregon	327	2	19	306	306	0	0
Washington	442	0	179	263	86	177	0

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a. Excludes service pipe. Data not adjusted to common diameter equivalent.
b. Includes 103 miles of underground storage pipe.
c. Includes fiberglass.

TRANSMISSION AND DISTRIBUTION

TABLE 48
STEEL AND OTHER METALS USED BY THE GAS UTILITY INDUSTRY, 1956-1978[a]

Type of Material	1956	1960	1964	1968	1972	1974	1976	1978
Steel, Total (000 Tons)	**1,465**	**2,238**	**1,449**	**2,138**	**877**	**489**	**580**	**552**
Pipe. Total	1.451	2.227	1.446	2.132	876	482	577	544
Pipe under 6"	360	339	367	340	214	105	250	256
Pipe 6"-14"	425	434	375	319	275	217	215	240
Pipe 16"-22"	b	229	177	179	188	97	80	29
Pipe 24" and over	666	1.225	527	1.294	198	63	32	19
Other Steel	14	11	3	6	1	7	3	8
Cast Iron (000 Tons)	**128**	**35**	**19**	**11**	**1**	c	c	c
Copper (Tons)	**1,460**	**1,125**	**3,626**	**2,863**	**1,464**	**653**	**189**	**138**
Aluminum (Tons)	**256**	**34**	**31**	**138**	**20**	**30**	**d**	**d**
Plastic Pipe (Tons)[e]	**f**	**f**	**848**	**3,728**	**8,790**	**11,328**	**13,460**	**24,725**

a. Includes usage of transmission companies. but excludes requirements for natural gas production facilities.
b. Included in Pipe 24" and over.
c. Less than 500 tons.
d. Not available due to insufficient reporting.
e. Tonnage of companies that installed about 2/3 total plastic distribution pipe mileage.
f. Not available.

TABLE 49
GAS UTILITY INDUSTRY REQUIREMENTS OF STEEL PIPE FOR NEW CONSTRUCTION AND MAINTENANCE AND REPAIR BY SIZE OF PIPE, 1978

(Thousands of tons)

Size of Pipe	Total	New Construction	Maintenance Repair
Normal Pipe Size—Inches			
3/4 and less	7.7	6.4	1.3
1	3.7	2.6	1.1
1 1/4	5.1	3.4	1.7
1 1/2	9.2	7.7	1.5
Outside Diameter—Inches			
2 3/8	88.6	34.0	54.6
3 1/2	11.0	9.3	1.7
4 1/2	130.3	84.7	45.6
6 5/8	85.9	72.2	13.7
8 5/8	57.2	45.2	12.0
10 3/4	49.3	48.2	1.1
12 3/4	42.1	33.5	8.6
14	0.4	0.1	0.3
16	8.1	3.9	4.2
18	6.5	0.1	6.4
20	5.2	1.8	3.4
22	0.1	0.1	0.0
24	0.3	0.2	0.1
26	1.3	1.2	0.1
30	11.4	10.9	0.5
34	0.0	0.0	0.0
36	22.7	22.7	0.0
42	0.0	0.0	0.0
Other Sizes	5.4	5.4	0.0
Total	**551.5**	**393.6**	**157.9**

TABLE 50
SELECTED STATISTICS FOR MAJOR TRANSMISSION COMPANIES

Name of Transmission System	Compressor Stations		Miles of Transmission Pipeline				1979	
	No. of Transmission Stations	Installed Horse-power	Total	10" & Under Diameter	10.1"—20.0" Diameter	20.1" & Over Diameter	Peak Day Sendout (MMCF)	Operating Revenues ($000,000)
Algonquin Gas Transmission Co.	3	30,900	909	281	138	490	758	$ 350.4
Cities Service Gas Co.	35	223,850	5,841	1,405	3,021	1,415	a	542.6
Colorado Interstate Gas Co.	17	150,780	2,663	421	1,334	908	1,371	672.7
Columbia Gas Transmission Co.[b]	81	446,179	9,946	3,430	4,851	1,665	6,677	1,844.3
Columbia Gulf Transmission Co.	12	514,866	3,841	194	453	3,194	1,522	163.0
Consolidated Gas Supply Corp.	44	118,862	3,645	656	2,244	745	4,311	1,371.6
East Tennessee Natural Gas Co.	10	20,520	1,012	447	383	182	351	148.6
El Paso Natural Gas Co.	55	796,024	9,419	2,310	2,113	4,996	3,690	2,171.3
Florida Gas Transmission Co.	21	151,180	4,285	1,402	893	1,990	818	324.1
Michigan Wisconsin Pipeline Co.	41	782,120	7,626	1,322	700	5,604	3,353	1,582.6
Midwestern Gas Transmission Co.	13	107,003	903	55	0	849	1,095	755.1
Mississippi River Transmission Co.[b]	16	85,795	1,978	196	370	1,412	1,024	390.1
Natural Gas Pipeline Co. of America	51	965,083	8,217	25	429	7,763	4,708	1,883.0
Northern Natural Gas Co.	60	897,992[b]	18,462	10,750	3,157	4,555	3,294	1,409.0
Pacific Gas Transmission Co.	13	238,125	637	0	0	637	1,264	1,052.1
Panhandle Eastern Pipeline Co.	63	653,279	6,765	771	1,365	4,629	2,527	1,188.4
South Georgia Natural Gas Co.	2	3,500	767	663	104	0	121	80.3
Southern Natural Gas Co.	41	366,726	6,960	1,256	3,524	2,179	2,492	1,205.5
Tenneco, Inc.	60	1,820,518[b]	13,448	1,370	1,872	10,206	4,644	1,979.6
Texas Eastern Transmission Corp.	75	1,199,660	8,963	920	1,618	6,425	3,952	1,454.2
Texas Gas Transmission Corp.	19	461,710	5,582	1,181	1,470	2,931	2,441	959.6
Transcontinental Gas Pipeline Corp.	38	968,085	9,231	894	1,634	6,703	6,655	1,488.7
Transwestern Pipeline Co.	169	228,549	3,562	1,756	251	1,555	977	504.6
Trunkline Gas Co.[b]	20	344,986	3,729	6	550	3,173	1,413	584.5
United Gas Pipeline Co.	31	192,569	7,286	2,347	3,059	1,880	a	1,786.6

a. Not available.
b. 1978 data.
Source: Federal Energy Regulatory Commission.

TRANSMISSION AND DISTRIBUTION

TABLE 51
MARKETED PRODUCTION AND INTERSTATE MOVEMENTS OF NATURAL GAS, 1978

(Millions of cubic feet)

Division and State	Marketed Production	Interstate Movements	
		Receipts[a]	Deliveries[b]
United States	19,974,033	46,509,886	45,596,873
New England	0	436,153	176,643
Connecticut	0	146,892	85,378
Maine	0	14,794[c]	0
Massachusetts	0	183,591	22,185
New Hampshire	0	d	0
Rhode Island	0	90,876	69,080
Vermont	0	d	0
Middle Atlantic	111,663	3,067,920	1,678,413
New Jersey	0	601,305	371,219
New York	13,900	799,340	241,313
Pennsylvania	97,763	1,667,275	1,065,881
East North Central	263,467	7,533,006	3,985,265
Illinois	1,159	2,245,661	1,037,504
Indiana	163	1,640,895	1,189,675
Michigan	148,047	664,144	0
Ohio	114,098	2,469,659	1,625,596
Wisconsin	0	512,647	132,490
West North Central	887,865	6,231,814	5,370,543
Iowa	0	1,220,827	970,927
Kansas	854,484	1,662,386	1,951,995
Minnesota	0	557,428	235,732
Missouri	0	1,537,431	1,168,810
Nebraska	2,882	1,201,335	1,041,156
North Dakota	30,499	13,155	500
South Dakota	0	39,252	1,423
South Atlantic	208,739	4,979,523	3,851,077
Delaware	0	20,920	0
District of Columbia	e	e	e
Florida	51,595	281,170	0
Georgia	0	965,994	684,739
Maryland	88[f]	591,470[f]	415,482[f]
North Carolina	0	539,601	454,777
South Carolina	0	660,057	539,601
Virginia	8,492	669,776	540,278
West Virginia	148,564	1,250,535	1,216,200
East South Central	262,690	14,735,588	14,119,883
Alabama	85,599	2,566,115	2,406,395
Kentucky	70,044	3,437,020	3,276,196
Mississippi	106,579	5,102,266	4,994,098
Tennessee	468	3,630,187	3,443,194
West South Central	15,905,055	4,599,457	12,286,275
Arkansas	106,792	2,346,437	2,224,216
Louisiana	7,476,497	677,122	5,716,788
Oklahoma	1,773,582	902,256	1,817,265
Texas	6,548,184	673,642	2,528,006
Mountain	1,820,382	2,589,784	3,217,343
Arizona	286	1,106,300	933,769
Colorado	183,693	267,866	165,043
Idaho	0	444,294	399,341
Montana	46,522	45,526	18,391
Nevada	0	65,507	0
New Mexico	1,174,198	413,935	1,309,836
Utah	58,416	168,495	101,036
Wyoming	357,267	77,861	289,927
Pacific	514,172	2,336,641	911,431
Alaska	203,088	0	48,434
California	311,084	1,252,011	0
Hawaii	0	0	0
Oregon	0	475,712	387,285
Washington	0	608,918	475,712

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a. Includes receipts from Canada of 384,536 million cubic feet into Idaho; 209,577 million cubic feet into Washington; 248,453 million cubic feet into Minnesota; 28,102 million cubic feet into Montana; 6,231 million cubic feet into New York; 4,224 million cubic feet into Vermont; and from Algeria 47,496 million cubic feet into Maryland; 22,358 million cubic feet into Georgia and 14,568 million cubic feet into Massachusetts.

b. Includes deliveries to Japan of 48,434 million cubic feet from Alaska; to Mexico 4,032 million cubic feet from Texas; and to Canada 66 million cubic feet from Montana.

c. Includes New Hampshire and Vermont.

d. Included in Maine.

e. Included in Maryland.

f. Includes District of Columbia.

Source: Energy Information Administration, U.S. Dept. of Energy, *Natural Gas Annual.*

SECTION VI
ENERGY CONSUMPTION

	1979	% Change 79/78
Annual Consumption		
(Trillions of Btu)		
Total	78,105	+0.0
Natural Gas Dry	19,912	−0.4
Crude Petroleum	37,135	−2.2
Bituminous & Lignite	15,145	+8.4
Hydropower	3,163	−0.2
Nuclear	2,750	−7.6

TABLE 52

ANNUAL CONSUMPTION OF ENERGY RESOURCES BY MAJOR SOURCES IN THE UNITED STATES, BY CONSUMING SECTORS, 1971-1979[a]

(Trillions of Btu)

Consuming sectors	Anthracite	Bituminous Coal and Lignite	Natural gas dry[b]	Petroleum[c]	Hydropower[d]	Nuclear power[d]	Total gross energy inputs[e]	Utility electricity purchased[f]	Total sector energy inputs
Household and commercial:									
1971	98	308	7,713	6,430	—	—	14,549	3,209	17,758
1972	75	233	7,943	6,666	—	—	14,917	3,478	18,395
1973	74	222	7,633	6,697	—	—	14,626	3,723	18,349
1974	66	232	7,518	6,099	—	—	13,915	3,726	17,641
1975	57	189	7,589	5,747	—	—	13,582	3,970	17,552
1976	58	181	8,117	6,333	—	—	14,689	4,143	18,832
1977[R]	g	225	7,536	6,869	—	—	14,630	3,936	18,566
1978[R]	g	250	7,762	6,916	—	—	14,928	4,100	19,028
1979	g	226	7,922	6,908	—	—	15,056	4,167	19,223
Industrial:									
1971	47	4,256	9,874	5,088	34	—	19,299	2,293	21,592
1972	35	4,240	9,882	5,643	35	—	19,835	2,493	22,328
1973	33	4,344	10,454	6,076	38	—	20,945	2,644	23,589
1974	35	4,094[h]	10,018	5,909	33	—	20,089	2,670	22,759
1975	35	3,786[h]	8,551	5,544	35	—	17,951	2,580	20,531
1976	36	3,782	8,382	6,166	33	—	18,399	2,810	21,209
1977[R]	g	3,509[h]	8,564	7,106	37	—	19,216	2,635	21,851
1978[R]	g	3,593[h]	8,400	7,179	36	—	19,208	2,732	21,940
1979	g	3,623[h]	7,851	7,439	37	—	18,950	2,845	21,795
Transportation:[i]									
1971	—	6	766	16,304	—	—	17,076	17	17,093
1972	—	4	787	17,290	—	—	18,081	17	18,098
1973	—	3	744	18,192	—	—	18,939	15	18,954
1974	—	2	685	17,734	—	—	18,421	16	18,437
1975	—	1	595	17,933	—	—	18,529	16	18,545
1976	—	j	582	18,733	—	—	19,315	16	19,331
1977[R]	—	—	543	19,173	—	—	19,716	10	19,726
1978[R]	—	—	539	20,057	—	—	20,596	9	20,605
1979	—	—	530	19,225	—	—	19,755	9	19,764
Electricity generation, utilities:									
1971	42	7,288	4,117	2,543	2,828	404	17,222	5,519	—
1972	40	7,796	4,086	3,134	2,911	576	18,543	5,988	—
1973	37	8,581	3,681	3,656	2,971	888	19,814	6,382	—
1974	38	8,482	3,512	3,480	3,276	1,211	19,999	6,412	—
1975	38	8,722	3,213	3,239	3,194	1,833	20,239	6,566	—
1976	38	9,653	3,134	3,479	3,031	2,032	21,367	6,969	—
1977[R]	g	10,245	3,285	4,028	2,482	2,702	22,742	6,581	—
1978[R]	g	10,134	3,297	3,813	3,132	2,977	23,353	6,841	—
1979	g	11,296	3,609	3,563	3,126	2,750	24,344	7,021	—
Miscellaneous and unaccounted for:									
1971	—	—	—	[illegible]	—	—	205	—	205
1972	—	—	—	[illegible]	—	—	233	—	233
1973	—	—	—	[illegible]	—	—	231	—	231
1974	—	—	—	245	—	—	245	—	245
1975	—	—	—	278	—	—	278	—	278
1976	—	—	—	227	—	—	227	—	227
1977[R]	—	—	—	k	—	—	k	—	k
1978[R]	—	—	—	k	—	—	k	—	k
1979	—	—	—	k	—	—	k	—	k
Total gross energy inputs:									
1971	187	11,858	22,469	30,570	2,862	404	68,351	—	56,648
1972	150	12,273	22,698	32,966	2,946	576	71,609	—	59,054
1973	144	13,150	22,512	34,852	3,009	888	74,555	—	61,123
1974	139	12,810[h]	21,733	33,467	3,309	1,211	72,669	—	59,082
1975	130	12,698[h]	19,948	32,741	3,229	1,833	70,579	—	56,906
1976	132	13,616	20,215	34,938	3,064	2,032	73,997	—	59,600
1977[R]	g	13,979[h]	19,928	37,176	2,519	2,702	76,304	—	60,143
1978[R]	g	13,977[h]	19,998	37,965	3,168	2,977	78,085	—	61,573
1979	g	15,145[h]	19,912	37,135	3,163	2,750	78,105	—	60,782

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a. Gross energy is the total of inputs into the economy of the primary fuels (including imports) or their derivatives, plus the generation of hydro and nuclear power (converted to equivalent energy inputs).

b. Excludes natural gas liquids.

c. Petroleum products including still gas, liquefied refinery gas and natural gas liquids.

d. Outputs and hydropower (adjusted for net imports or net exports) are converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants provided by the Federal Power Commission using 10,383 Btu per net KWH for 1975. Energy input for nuclear power converted at an average heat rate of 10,660 Btu per net KWH based on information from the Atomic Energy Commission Excludes inputs for power generated by non-utility plants, which are included within the other consuming sectors.

e. Gross energy resource inputs with electricity generation shown as separate consuming sector.

f. Utility electricity generated and imported, distributed to the other consuming sectors as energy resource inputs. Distribution to sectors is based on historical series in Edison Electric Institute Statistical Yearbook. Conversion of electricity to energy equivalent by sector was made at the value of contained energy corresponding to 100 percent thermal efficiency using a theoretical rate of 3,412 Btu/KWH.

g. Included in "Bituminous Coal and Lignite."

h. Includes net imports of coke of 59 trillion Btu in1974, 14 trillion Btu in 1975, 15 trillion Btu in 1977, 131 trillion Btu in 1978, and 66 trillion Btu in 1979.

i. Includes bunkers and military transportation.

j. Less than 0.5 trillions of Btu. k. Not available. R—Revised.

Source: Prior to 1977, U.S. Bureau of Mines, 1977 and beyond, *Monthly Energy Review*, U.S. Department of Energy.

ENERGY CONSUMPTION

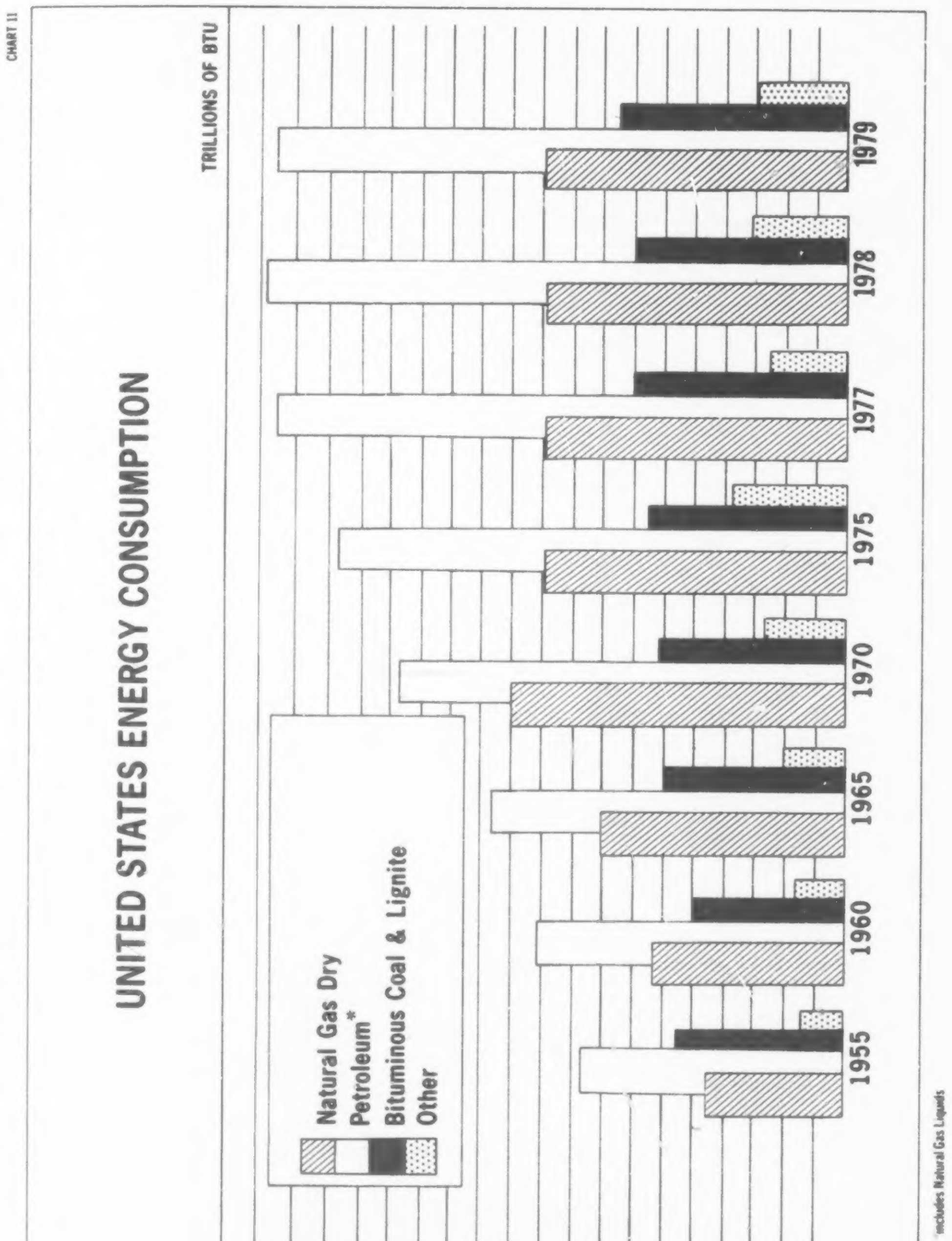


TABLE 53

ANNUAL CONSUMPTION OF FOSSIL ENERGY RESOURCES AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER IN THE UNITED STATES, 1955-1979[a]

(Trillions of Btu)[b]

Year	Natural Gas Dry[c]	Natural Gas Liquids	Crude Petroleum and Products	Bituminous Coal and Lignite	Anthracite Coal	Hydropower[d]	Nuclear[d]	Grand Total Energy
1955	9,232	1,196	16,328	11,104	599	1,497	—	39,956
1956	9,834	1,209	17,418	11,338	619	1,598	—	42,007
1957	10,416	1,242	17,328	10,838	528	1,567	—	41,920
1958	10,995	1,240	17,428	9,607	483	1,740	—	41,493
1959	11,991	1,348	18,399	9,596	478	1,695	—	43,507
1960	12,736	1,427	18,608	9,967	447	1,626	5	44,816
1961	13,228	1,498	18,989	9,809	404	1,628	17	45,573
1962	14,027	1,586	19,681	10,160	363	1,780	23	47,620
1963	14,843	1,703	20,247	10,722	361	1,740	33	49,649
1964	15,515	1,772	20,700	11,295	365	1,873	34	51,554
1965	16,097	1,853	21,566	12,030	328	2,057	38	53,969
1966	17,393	1,989	22,405	12,740	290	2,073	58	56,948
1967	18,250	2,043	23,292	11,982	274	2,344	80	58,265
1968	19,580	2,239	24,813	12,401	258	2,342	130	61,763
1969	21,020	2,459	25,962	12,509	224	2,659	146	64,979
1970	22,029	2,494	27,043	12,488	210	2,650	229	67,143
1971	22,470	2,496	28,074	11,858	187	2,862	404	68,351
1972	22,698	2,706	30,260	12,273	150	2,946	576	71,609
1973	22,512	2,652	32,200	13,150	144	3,009	888	74,555
1974	21,733	2,565	30,902	12,810[e]	139	3,309	1,211	72,669
1975	19,948	2,484	30,257	12,698[e]	130	3,229	1,833	70,579
1976	20,215	f	34,938	13,617	132	3,064	2,032	73,997
1977[R]	19,928	f	37,176	13,979[e]	g	2,519	2,702	76,403
1978[R]	19,998	f	37,965	13,977[e]	g	3,168	2,977	78,085
1979	19,912	f	37,135	15,145[e]	g	3,163	2,750	78,105

a. Represents production minus exports plus imports, and adjusted for change in inventories.
b. The Btu value per cubic foot for natural gas dry for 1964 and prior years is 1,035; for 1965-1968 1,032; for 1969, 1971 and 1972 1,031; for 1973 1,027; for 1974 1,021; for 1975 1,024; for 1976-1977 1,021; 1978 1,019; 1979 1,021. See Table 19 for Btu values assigned to other energy sources.
c. Marketed production minus shrinkage caused by liquids extraction (34 cubic feet per gallon produced).
d. See Table 19 for procedures used to determine Btu equivalents.
e. Includes net imports of coke of 59 trillion Btu in 1974 and 14 trillion Btu in 1975, 15 trillion Btu in 1977, 131 trillion Btu in 1978, and 66 trillion Btu in 1979.
f. Included in "Crude Petroleum and Products."
g. Included in "Bituminous Coal and Lignite."
R—Revised.
Source: Prior to 1977, U.S. Bureau of Mines. 1977 and beyond, *Monthly Energy Review*, U.S. Department of Energy.

ENERGY CONSUMPTION

TABLE 54

ANNUAL CONSUMPTION OF FOSSIL ENERGY RESOURCES AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER IN THE UNITED STATES, 1955-1979

(Percentage)

Year	Natural Gas Dry	Natural Gas Liquids	Crude Petroleum and Products	Bituminous Coal and Lignite	Anthracite Coal	Hydro-power	Nuclear	Grand Total Energy
1955	23.1	3.0	40.8	27.8	1.5	3.8	—	100.0
1956	23.4	2.9	41.5	27.0	1.4	3.8	—	100.0
1957	24.8	3.0	41.4	25.8	1.3	3.7	—	100.0
1958	26.5	3.0	42.0	23.1	1.2	4.2	—	100.0
1959	27.6	3.1	42.3	22.0	1.1	3.9	—	100.0
1960	28.4	3.2	41.6	22.2	1.0	3.6	a	100.0
1961	29.0	3.3	41.6	21.5	0.9	3.6	0.1	100.0
1962	29.5	3.3	41.3	21.3	0.8	3.7	0.1	100.0
1963	29.9	3.4	40.8	21.6	0.7	3.5	0.1	100.0
1964	30.5	3.4	39.9	21.8	0.7	3.6	0.1	100.0
1965	29.8	3.4	40.0	22.3	0.6	3.8	0.1	100.0
1966	30.9	3.5	39.7	22.4	0.5	3.7	0.1	100.0
1967	31.3	3.5	40.0	20.6	0.5	4.0	0.1	100.0
1968	31.7	3.6	40.2	20.1	0.4	3.8	0.2	100.0
1969	32.4	3.8	39.9	19.3	0.3	4.1	0.2	100.0
1970	32.8	3.7	40.3	18.6	0.3	4.0	0.3	100.0
1971	32.9	3.7	41.1	17.3	0.3	4.2	0.6	100.0
1972	31.7	3.8	42.3	17.1	0.2	4.1	0.8	100.0
1973	30.2	3.6	43.2	17.6	0.2	4.0	1.2	100.0
1974	29.9	3.5	42.5	17.6	0.2	4.6	1.7	100.0
1975	28.3	3.5	42.8	18.0	0.2	4.6	2.6	100.0
1976	27.3	3.4	43.8	18.4	0.2	4.1	2.7	100.0
1977	26.1	c	48.6	18.5	b	3.3	3.5	100.0
1978	25.4	c	48.6	18.2	b	4.0	3.8	100.0
1979	25.5	c	47.6	19.3	b	4.1	3.5	100.0

a. Less than 0.05.
b. Included in "Bituminous Coal and Lignite."
c. Included in "Crude Petroleum and Products."

Source: Same as Table 53.

TABLE 55

ENERGY CONSUMPTION PER CAPITA IN THE UNITED STATES, 1955-1979*

Year	Total Energy Consumed (Trillions of Btu)	Natural Gas Consumed (Trillions of Btu)	Resident Population (Thousands)	Energy Consumed Per Capita (Millions of Btu)	Natural Gas Consumed Per Capita (Millions of Btu)	Gross National Product (1972 $)	Total Energy Per Dollar of GNP (1972 $)	Index of Industrial Production (1972 = 100)
1955	39,956	9,232	164,309	243	56	654.8	61.0	53.0
1956	42,007	9,834	167,310	251	59	668.8	62.8	54.9
1957	41,920	10,416	170,375	246	61	680.9	61.6	55.3
1958	41,493	10,995	173,332	239	63	679.5	61.1	51.4
1959	43,507	11,991	177,135	246	68	720.4	60.4	58.0
1960	44,816	12,736	179,992	249	71	736.8	60.8	59.7
1961	45,573	13,228	183,057	249	72	755.3	60.3	60.2
1962	47,620	14,027	185,890	256	75	799.1	59.6	64.9
1963	49,649	14,843	188,658	263	79	830.7	59.8	68.2
1964	51,554	15,515	191,372	269	81	874.4	59.0	72.7
1965	53,969	16,097	193,815	278	83	925.9	58.3	78.7
1966	56,412	17,393	195,936	288	89	981.0	57.5	78.0
1967	58,265	18,250	197,859	294	92	1,007.7	57.8	86.8
1968	61,763	19,580	199,846	309	98	1,051.8	58.7	90.8
1969	64,979	21,020	201,423	323	104	1,078.8	60.2	96.1
1970	67,143	22,029	203,185	330	108	1,075.3	62.4	92.5
1971	68,348	22,469	207,203	330	108	1,107.5	61.7	92.7
1972	71,609	22,698	208,969	343	109	1,171.1	61.1	100.0
1973	74,555	22,512	209,844	355	107	1,233.4	60.5	109.0
1974	72,668	21,733	211,389	344	103	1,210.7	60.0	108.3
1975	70,580	19,948	213,032	331	94	1,191.7	59.2	102.3
1976	73,999	20,216	214,649	345	94	1,274.7	58.1	112.7
1977^{R}	76,304	19,928	217,132	351	92	1,337.3	57.1	118.9
1978^{R}	78,085	19,998	219,044	357	91	1,399.2	55.8	126.8
1979	78,105	19,912	221,227	353	90	1,431.6	54.6	132.1

*Alaska and Hawaii included subsequent to 1958.
R-Revised.
Sources: U.S. Department of Energy, U.S. Bureau of the Census and the Federal Reserve Board.

TABLE 56
GAS UTILITY INDUSTRY AVERAGE ANNUAL CONSUMPTION PER CUSTOMER, BY CLASS OF SERVICE 1955-1979[a]

(MMBtu/Customer)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1955	233.8	85.2	294.5	29,167.5	10.250.9
1956	245.6	90.5	306.4	30,752.8	8,996.6
1957	252.8	92.5	316.1	30,663.6	11,309.1
1958	257.0	97.7	334.5	30.375.6	10,770.1
1959	274.2	100.7	350.1	33,478.4	11,836.6
1960	281.0	104.8	374.2	33,495.0	12,577.5
1961	283.4	106.7	390.7	32,621.7	13,468.7
1962	295.1	110.9	420.7	32,713.9	13,795.1
1963	302.8	112.1	430.6	33,630.8	13,460.2
1964	317.9	115.3	469.5	37,089.1	13,234.6
1965	320.9	116.5	482.1	36,982.6	12,009.8
1966	336.4	118.8	510.0	38,259.3	12,755.1
1967	345.2	121.5	537.8	38,710.3	11,397.0
1968	362.4	124.1	567.6	40,378.0	13,129.2
1969	376.7	128.4	611.0	42,220.0	11,327.2
1970	386.8	129.2	640.9	42,386.7	12,232.3
1971	395.0	129.9	673.8	42,235.0	17,064.6
1972	397.7	130.4	697.3	41,948.8	16,428.8
1973	377.0	124.5	684.6	40,051.7	15,129.5
1974	361.1	119.6	676.1	42,066.8	12,586.1
1975	333.6	121.9	708.9	37,253.5	12,039.8
1976	329.7	121.3	718.6	39,563.9	5,128.6
1977	316.8	118.7	714.8	38,717.2	5,809.3
1978	322.2	121.0	743.6	36,167.9	6,490.4
1979	330.3	118.6	726.5	39,434.4	7,033.6

a. Excludes customers purchasing for resale and sales for resale. Customer data is based on yearly averages. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.

b. Prior to 1976, "Other" electric generation (See Table 72) is included in the "Other" class of service. For 1976 and beyond, all electric generation is included in the Industrial category.

TABLE 57
GAS UTILITY INDUSTRY AVERAGE ANNUAL CONSUMPTION PER CUSTOMER BY STATE AND CLASS OF SERVICE, 1979[a]

(MMBtu/Customer)

Division and State	Total	Class of Service			
		Residential	Commercial	Industrial[b]	Other
United States	**330.3**	**118.6**	**726.5**	**39,434.4**	**7,033.6**
New England	**168.0**	**87.4**	**623.8**	**8,099.4**	**927.1**
Connecticut	174.2	87.8	578.7	8,333.1	691.3
Maine	127.5	38.5	446.2	25,134.5	c
Massachusetts	163.7	87.5	681.5	7,699.2	909.4
New Hampshire	169.7	84.2	510.0	15,266.4	3,951.2
Rhode Island	170.7	89.4	431.6	6,628.7	c
Vermont	317.2	108.4	743.8	99,104.2	33.0
Middle Atlantic	**197.2**	**103.4**	**513.3**	**21,500.4**	**2,960.5**
New Jersey	156.4	86.9	344.1	14,774.6	11,483.3
New York	149.9	91.3	495.4	10,255.9	2,607.4
Pennsylvania	309.9	136.5	762.0	47,651.6	4,093.6
East North Central	**368.1**	**167.8**	**985.5**	**31,611.3**	**2,749.4**
Illinois	365.5	176.0	1,073.4	21,266.9	1,571.1
Indiana	401.9	155.3	715.4	56,073.6	4,122.1
Michigan	374.7	176.0	1,209.8	32,865.8	1,875.0
Ohio	352.6	167.5	896.9	59,393.6	2,806.4
Wisconsin	362.4	137.0	829.6	21,147.7	2,318.2
West North Central	**353.9**	**146.2**	**846.6**	**36,864.4**	**5,847.6**
Iowa	359.8	145.8	735.8	58,268.3	2,910.3
Kansas	537.6	146.1	852.7	48,100.9	18,361.7
Minnesota	354.0	155.8	802.0	17,160.0	6,403.9
Missouri	289.4	148.5	1,134.9	110,968.3	2,589.4
Nebraska	369.7	151.8	680.9	34,552.2	536.3
North Dakota	304.2	159.1	1,211.6	9,942.3	61,300.0
South Dakota	265.7	141.3	772.8	9,446.3	52,600.0
South Atlantic	**310.5**	**95.4**	**658.4**	**43,101.1**	**16,534.8**
Delaware	259.2	95.7	715.6	49,264.4	7,471.0
District of Columbia	172.8	101.7	665.7	43,307.1	c
Florida	521.3	46.8	841.1	214,639.1	57,831.2
Georgia	293.3	98.3	730.5	66,070.9	3,145.8
Maryland	198.9	98.4	463.4	11,244.5	1,162.1
North Carolina	343.8	97.8	537.4	37,707.8	1,534.7
South Carolina	457.8	79.6	608.8	73,401.4	11,679.8
Virginia	246.8	100.7	685.9	20,439.7	2,970.7
West Virginia	351.2	135.7	744.4	152,809.4	5,290.9
East South Central	**364.7**	**107.4**	**594.3**	**66,146.5**	**1,950.7**
Alabama	349.6	88.1	608.2	74,466.4	360.0
Kentucky	295.7	138.3	642.7	55,764.5	5,118.1
Mississipi	410.0	88.7	435.3	87,265.6	4,453.1
Tennessee	431.8	109.5	640.8	53,486.8	694.2
West South Central	**597.9**	**92.5**	**577.2**	**84,390.0**	**21,179.0**
Arkansas	427.6	104.8	538.2	71,195.3	11,267.5
Louisiana	489.0	85.0	442.6	146,683.0	10,710.6
Oklahoma	614.9	115.8	666.9	93,279.5	10,373.0
Texas	619.0	87.0	583.2	75,813.4	23,819.6
Mountain	**346.5**	**117.2**	**753.7**	**48,072.6**	**6,055.3**
Arizona	259.3	66.0	515.2	39,108.3	5,044.1
Colorado	313.9	134.9	844.4	47,574.5	8,876.1
Idaho	463.1	94.1	683.7	131,384.6	c
Montana	356.8	155.0	872.3	37,469.0	81,250.0
Nevada	485.5	97.1	1,753.9	919,946.3	99,450.0
New Mexico	424.2	109.1	571.0	22,345.8	4,652.5
Utah	342.9	152.2	709.2	90,538.7	13,000.0
Wyoming	491.2	150.2	852.5	153,807.4	31,217.1
Pacific	**256.5**	**92.7**	**708.1**	**27,937.6**	**18,969.5**
Alaska	767.1	201.7	1,361.3	5,600,000.0	1,666,666.7
California	242.5	91.8	707.3	26,243.6	6,395.6
Hawaii	105.8	26.1	391.4	1,110.3	c
Oregon	347.1	90.3	518.1	88,459.4	c
Washington	422.3	109.0	793.9	68,836.6	17,295.7

a. Excludes customers purchasing for resale and sales for resale. Customer data is based on yearly averages.
b. Includes Electric Generation.
c. No sales reported.

TABLE 58
GAS UTILITY INDUSTRY AVERAGE ANNUAL RESIDENTIAL CONSUMPTION PER CUSTOMER BY STATE, 1955-1979[a]

(MMBtu/Customer)

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	**85.2**	**104.8**	**116.5**	**129.2**	**121.9**	**121.0**	**118.6**
New England	**28.8**	**49.5**	**67.7**	**86.0**	**85.3**	**91.3**	**87.4**
Connecticut	29.5	51.2	68.7	87.6	84.6	90.1	87.8
Maine	24.5	29.3	32.1	38.2	38.7	40.7	38.5
Massachusetts	29.9	50.2	69.2	87.0	86.0	91.7	87.5
New Hampshire	29.5	51.4	74.1	93.3	95.1	99.4	84.2
Rhode Island	23.2	47.6	65.0	82.9	84.0	92.2	89.4
Vermont	15.3	19.9	23.1	65.2	93.3	108.2	108.4
Middle Atlantic	**59.0**	**77.6**	**91.2**	**107.3**	**102.1**	**107.4**	**103.4**
New Jersey	36.1	56.9	73.5	92.2	88.5	91.7	86.9
New York	45.6	63.3	77.7	91.5	89.4	94.2	91.3
Pennsylvania	98.6	117.8	128.7	146.5	135.1	141.9	136.5
East North Central	**103.3**	**137.1**	**159.3**	**175.7**	**164.5**	**171.1**	**167.8**
Illinois	73.0	109.4	139.9	164.8	168.9	178.4	176.0
Indiana	72.7	103.5	134.1	159.9	151.5	159.7	155.3
Michigan	101.5	146.4	173.5	189.1	167.7	176.1	176.0
Ohio	159.2	183.0	188.5	193.5	171.2	173.2	167.5
Wisconsin	56.6	92.2	129.0	145.0	139.0	143.4	137.0
West North Central	**130.0**	**151.0**	**158.9**	**167.9**	**152.6**	**147.0**	**146.2**
Iowa	117.6	149.3	162.1	167.8	152.2	146.6	145.8
Kansas	149.4	157.0	156.6	165.8	150.4	149.1	146.1
Minnesota	126.0	145.9	167.3	175.6	159.7	151.1	155.8
Missouri	124.4	149.9	152.0	165.5	148.9	[illegible]	148.5
Nebraska	140.0	160.5	162.3	167.5	155.2	154.3	151.8
North Dakota	95.8	118.8	164.5	171.4	163.0	157.9	159.1
South Dakota	125.8	145.8	158.5	153.2	145.0	143.5	141.3
South Atlantic	**78.9**	**93.1**	**95.9**	**111.0**	**96.3**	**101.7**	**95.4**
Delaware	37.2	63.7	85.6	109.0	93.6	103.0	95.7
District of Columbia	68.3	79.8	87.8	102.7	95.9	104.5	101.7
Florida	23.3	19.6	27.1	48.2	38.6	46.2	46.8
Georgia	97.0	110.9	103.1	123.9	103.5	110.0	98.3
Maryland	62.8	84.3	95.3	110.6	97.5	102.3	98.4
North Carolina	41.2	78.2	89.8	112.1	92.7	106.1	97.8
South Carolina	36.3	68.8	75.9	91.1	72.7	82.5	79.6
Virginia	62.6	83.4	94.0	111.1	100.1	106.1	100.7
West Virginia	156.9	163.5	159.0	161.0	149.4	142.7	135.7
East South Central	**105.5**	**118.1**	**111.5**	**126.0**	**107.1**	**113.8**	**107.4**
Alabama	86.7	96.6	90.7	106.9	91.2	97.7	88.1
Kentucky	136.5	153.3	144.9	157.4	136.7	145.0	138.3
Mississippi	86.3	97.7	89.0	105.5	86.6	93.2	88.7
Tennessee	104.2	118.6	114.3	126.5	105.5	112.2	109.5
West South Central	**83.4**	**96.5**	**92.2**	**104.6**	**95.9**	**96.7**	**92.5**
Arkansas	104.6	121.7	113.8	133.0	114.0	114.4	104.8
Louisiana	74.7	87.4	82.1	95.9	81.9	88.5	85.0
Oklahoma	108.2	114.9	116.3	126.8	120.6	116.8	115.8
Texas	76.4	91.2	86.3	97.6	91.5	91.3	87.0
Mountain	**132.6**	**138.2**	**140.2**	**140.5**	**131.0**	**113.6**	**117.2**
Arizona	68.1	75.3	77.0	78.4	77.3	62.5	66.0
Colorado	147.3	150.1	153.4	155.0	147.2	136.5	134.9
Idaho	33.3	100.5	118.0	114.7	110.7	83.3	94.1
Montana	184.3	175.9	185.0	175.5	171.2	151.5	155.0
Nevada	62.4	88.8	103.1	112.5	113.2	94.0	97.1
New Mexico	113.2	133.1	134.4	130.3	126.6	101.4	109.1
Utah	175.7	202.4	201.2	212.1	180.1	145.9	152.0
Wyoming	189.3	173.9	173.0	180.5	161.7	142.7	150.2
Pacific	**89.7**	**92.3**	**104.6**	**105.7**	**109.9**	**90.1**	**92.7**
Alaska	b	b	230.0	199.3	221.3	200.3	201.7
California	91.5	93.2	105.0	104.6	109.4	89.1	91.8
Hawaii	b	25.2	27.2	33.7	29.1	26.4	26.1
Oregon	50.4	78.9	90.6	113.2	107.0	90.3	90.3
Washington	33.6	105.1	115.5	128.3	122.0	105.7	109.0

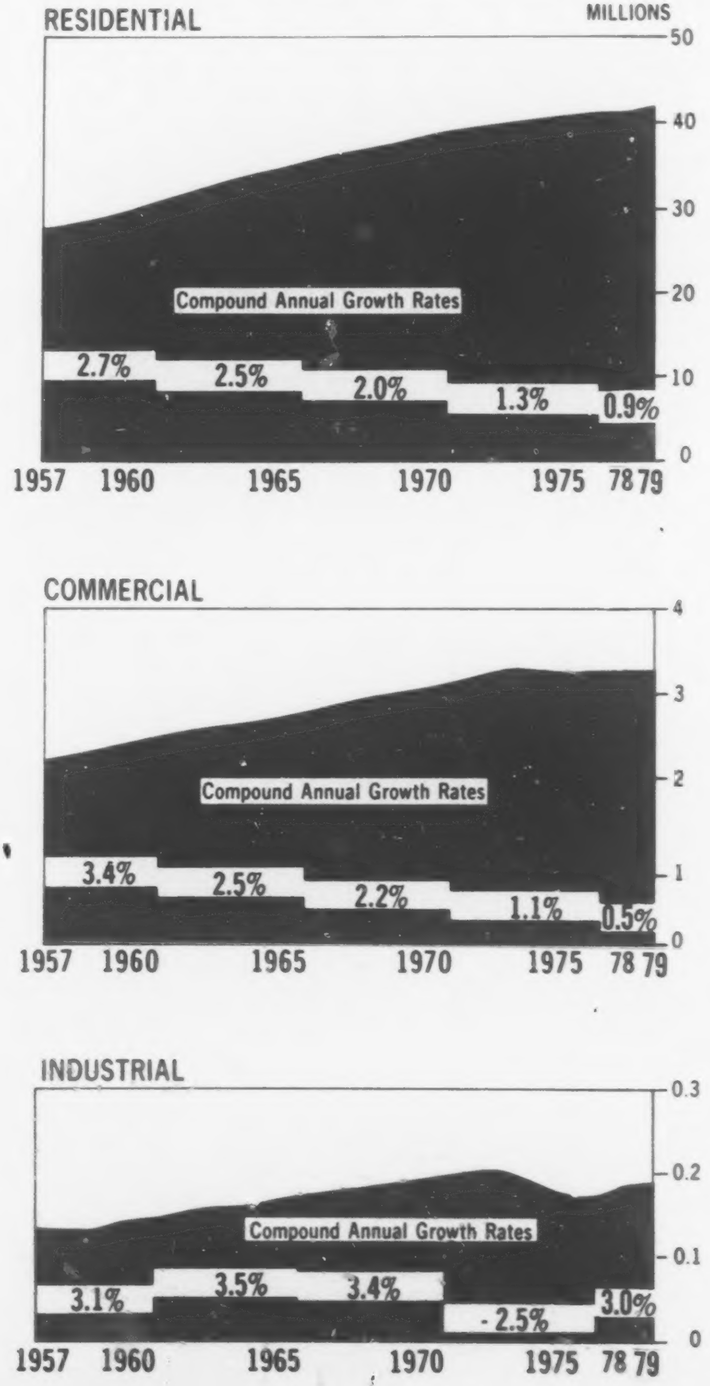
a. Customer data is based on yearly averages.
b. Not available.

SECTION VII
CUSTOMERS

	1979	% Change 79/78
Gas Utility Industry (Thousands)		
Total	46,478.3	+1.5
Residential	42,821.3	+1.5
Commercial	3,422.8	+1.6
Industrial	189.4	+0.1
Other	44.8	−4.1

CHART 12

GAS UTILITY INDUSTRY CUSTOMERS



REFERENCE: TABLE 59

CUSTOMERS

TABLE 59
GAS UTILITY INDUSTRY CUSTOMERS, BY CLASS OF SERVICE, YEARLY AVERAGES, 1955-1979[a]

(Thousands)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1955	28.478.8	26.282.6	2.047.5	121.2	27.5
1956	29.536.6	27.241.0	2.140.3	125.8	29.5
1957	30.476.0	28.101.2	2.211.1	132.0	31.7
1958	31.242.1	28.786.5	2.286.6	134.2	34.8
1959	32.065.9	29.529.6	2.363.9	136.3	36.1
1960	33.053.8	30.417.5	2.458.3	140.6	37.4
1961	33.830.5	31.118.2	2.528.9	146.7	36.7
1962	34.683.4	31.893.0	2.597.9	155.9	36.6
1963	35.551.0	32.710.8	2.639.6	161.7	38.9
1964	36.463.3	33.551.2	2.712.2	159.4	40.5
1965	37.337.5	34.340.8	2.789.7	166.2	40.8
1966	38.228.4	35.141.8	2.868.2	173.9	44.5
1967	39.076.5	35.915.1	2.933.6	181.2	46.6
1968	39.930.0	36.691.1	3.003.6	188.1	47.2
1969	40.854.0	37.538.3	3.073.8	192.7	49.2
1970	41.482.1	38.097.0	3.130.9	199.1	55.1
1971	42.241.8	38.788.7	3.199.0	204.7	49.5
1972	42.954.8	39.428.0	3.263.6	209.2	54.1
1973	43.711.0	40.115.5	3.331.4	209.1	55.2
1974	44.267.3	40.626.7	3.392.0	193.8	54.7
1975	44.554.5	40.950.3	3.366.9	183.5	53.8
1976	44.941.5	41.337.6	3.371.5	179.7	52.6
1977	45.273.9	41.682.4	3.371.0	173.3	47.3
1978	45.788.8	42.183.2	3.369.8[c]	189.2[c]	46.7
1979	46.478.3	42.821.3	3.422.8	189.4	44.8

a. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.
b. Prior to 1976, "Other" electric generation (see Table 72) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.
c. Reclassification of customers.

TABLE 60
GAS UTILITY INDUSTRY CUSTOMERS, BY STATE AND CLASS OF SERVICE, AVERAGES, 1979

(Thousands)

Division and State	Total	Class of Service			
		Residential	Commercial	Industrial[a]	Other
United States	**46,478.3**	**42,821.3**	**3,422.8**	**189.4**	**44.8**
New England	**1,700.0**	**1,570.3**	**117.0**	**8.9**	**3.8**
Connecticut	394.6	361.5	30.7	2.3	b
Maine	14.7	13.3	1.4	b	0.0
Massachusetts	1,059.8	982.7	69.1	4.9	3.2
New Hampshire	52.5	47.8	4.4	0.1	0.2
Rhode Island	163.8	152.0	10.3	1.5	0.0
Vermont	14.7	13.0	1.1	b	0.5
Middle Atlantic	**8,080.2**	**7,498.0**	**547.9**	**23.5**	**10.9**
New Jersey	1,842.7	1,654.7	182.5	5.5	b
New York	3,924.1	3,679.0	225.1	11.6	8.4
Pennsylvania	2,313.4	2,164.2	140.3	6.4	2.4
East North Central	**10,597.8**	**9,787.9**	**758.7**	**47.5**	**3.7**
Illinois	3,265.5	3,012.4	233.1	19.4	0.7
Indiana	1,224.8	1,120.0	100.0	4.4	0.5
Michigan	2,373.7	2,206.3	158.0	9.4	b
Ohio	2,724.1	2,525.4	190.1	6.1	2.4
Wisconsin	1,009.7	923.8	77.6	8.3	0.1
West North Central	**4,063.1**	**3,682.4**	**362.2**	**16.8**	**1.9**
Iowa	742.7	662.5	78.0	1.9	0.3
Kansas	712.8	648.7	59.0	4.8	0.3
Minnesota	782.9	711.2	64.6	6.6	0.5
Missouri	1,208.9	1,122.8	84.8	0.8	0.6
Nebraska	433.7	376.3	55.4	1.9	0.2
North Dakota	82.4	72.7	9.5	0.2	b
South Dakota	99.7	88.2	10.9	0.6	b
South Atlantic	**3,979.7**	**3,647.9**	**313.4**	**14.1**	**4.1**
Delaware	80.2	75.4	4.5	0.2	0.1
District of Columbia	149.1	133.5	15.6	b	0.0
Florida	427.7	394.6	31.6	0.6	0.9
Georgia	998.3	920.7	74.5	2.2	0.9
Maryland	767.8	714.4	48.0	5.3	0.1
North Carolina	356.4	314.5	39.2	1.8	0.8
South Carolina	288.4	260.3	26.2	1.2	0.6
Virginia	519.2	474.1	42.0	2.4	0.7
West Virginia	392.6	360.4	31.8	0.4	0.0
East South Central	**2,190.2**	**1,980.0**	**193.2**	**6.8**	**10.1**
Alabama	669.8	619.8	45.9	2.0	2.1
Kentucky	623.8	568.5	52.7	1.2	1.3
Mississippi	393.6	353.4	37.0	1.2	2.0
Tennessee	503.0	438.3	57.6	2.4	4.7
West South Central	**5,418.2**	**4,939.4**	**444.8**	**27.1**	**6.8**
Arkansas	480.1	424.9	53.2	1.9	0.1
Louisiana	974.4	906.5	64.1	2.5	1.2
Oklahoma	798.1	721.5	72.6	3.8	0.2
Texas	3,165.8	2,886.5	254.9	18.9	5.4
Mountain	**2,617.5**	**2,373.3**	**232.1**	**9.0**	**3.1**
Arizona	566.8	521.8	42.2	2.3	0.5
Colorado	810.7	724.1	84.7	1.8	0.1
Idaho	108.9	93.9	14.7	0.2	0.0
Montana	181.6	161.5	19.6	0.5	b
Nevada	155.2	149.0	6.2	0.1	b
New Mexico	317.5	282.4	29.2	3.4	2.5
Utah	361.0	338.3	22.1	0.6	b
Wyoming	115.8	102.3	13.4	0.2	b
Pacific	**7,831.7**	**7,342.1**	**453.5**	**35.7**	**0.4**
Alaska	39.5	34.2	5.3	b	b
California	7,128.8	6,725.7	370.5	32.3	0.4
Hawaii	33.3	29.3	2.4	1.6	0.0
Oregon	266.1	233.4	32.1	0.6	0.0
Washington	364.0	319.5	43.2	1.2	b

a. Includes Electric Generation.
b. Less than .05.

CUSTOMERS

TABLE 61
GAS UTILITY INDUSTRY CUSTOMERS, BY STATE, 1955-1979[a]

(Thousands)

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	**28,478.8**	**33,053.8**	**37,337.5**	**41,482.1**	**44,554.8**	**45,788.8**	**46,478.3**
New England	**1,616.5**	**1,622.6**	**1,641.6**	**1,692.3**	**1,692.5**	**1,681.0**	**1,700.0**
Connecticut	372.1	376.7	378.8	393.7	392.5	391.6	394.6
Maine	38.7	33.4	28.5	23.4	18.1	15.2	14.7
Massachusetts	988.3	1.002.3	1.024.7	1.055.3	1.055.4	1.050.8	1.059.8
New Hampshire	36.2	37.4	40.2	44.1	45.4	46.5	52.5
Rhode Island	159.9	155.9	154.5	161.4	164.6	162.2	163.8
Vermont	21.3	16.9	14.9	14.4	16.6	14.7	14.7
Middle Atlantic	**7,180.5**	**7,607.6**	**7,919.6**	**8,192.1**	**8,230.3**	**8,058.1**	**8,080.2**
New Jersey	1,360.7	1,504.9	1,640.6	1,763.1	1.815.1	1.822.4	1.842.7
New York	3,776.3	3,953.5	4,076.4	4,125.6	4.102.5	3.932.6	3,924.1
Pennsylvania	2.043.5	2.149.2	2.202.5	2,303.4	2.312.7	2.303.0	2.313.4
East North Central	**6,322.8**	**7,318.9**	**8,400.3**	**9,508.7**	**10,253.1**	**10,460.7**	**10,597.8**
Illinois	1.966.7	2.279.4	2.634.6	2.938.4	3.134.2	3.228.5	3.265.5
Indiana	674.6	780.0	933.8	1.084.4	1.187.7	1.211.3	1.224.8
Michigan	1.298.7	1.502.1	1,732.9	2.018.5	2.234.5	2.313.6	2.373.7
Ohio	1.908.6	2.208.4	2.424.2	2.644.5	2.757.8	2,721.8	2.724.1
Wisconsin	474.2	549.0	674.8	822.9	939.0	985.5	1.009.7
West North Central	**2,281.3**	**2,655.5**	**3,074.7**	**3,499.9**	**3,820.4**	**3,982.7**	**4,063.1**
Iowa	364.7	440.4	541.9	642.1	691.6	718.6	742.7
Kansas	477.8	532.8	586.5	643.1	669.8	702.5	712.8
Minnesota	408.4	476.1	560.9	640.9	726.8	760.4	782.9
Missouri	706.1	816.8	933.4	1.068.2	1.167.1	1.195.4	1.208.9
Nebraska	244.9	288.4	330.2	367.7	400.5	427.8	433.9
North Dakota	31.4	39.4	47.4	55.2	71.3	80.1	82.4
South Dakota	48.0	61.6	74.4	82.6	93.1	97.9	99.7
South Atlantic	**2,011.0**	**2,507.3**	**2,995.6**	**3,528.9**	**3,861.9**	**3,937.2**	**3,979.7**
Delaware	56.0	64.2	73.3	81.4	82.8	80.4	80.2
District of Columbia	181.9	177.3	172.4	162.8	155.4	149.6	149.1
Florida	184.2	244.1	294.2	370.1	391.8	421.4	427.7
Georgia	368.3	534.9	670.9	804.4	912.3	967.7	998.3
Maryland	477.9	558.7	639.6	712.5	774.6	767.8	767.8
North Carolina	75.2	121.6	193.2	285.2	338.0	350.3	356.4
South Carolina	47.9	87.0	154.7	233.3	283.1	287.6	288.4
Virginia	291.4	361.8	432.7	497.3	528.4	519.4	519.2
West Virginia	329.1	357.2	364.6	381.9	395.4	393.0	392.6
East South Central	**1,129.8**	**1,470.9**	**1,699.6**	**1,947.2**	**2,139.2**	**2,177.0**	**2,190.2**
Alabama	326.6	453.3	522.1	588.8	637.1	662.9	669.8
Kentucky	342.1	432.9	506.0	583.0	631.3	622.6	623.8
Mississippi	219.0	271.2	310.6	347.3	380.3	390.6	393.6
Tennessee	242.1	313.5	360.9	428.1	490.5	500.9	503.0
West South Central	**3,184.8**	**3,840.3**	**4,329.9**	**4,758.5**	**5,092.0**	**5,319.2**	**5,418.2**
Arkansas	236.3	299.1	362.1	419.3	461.4	472.9	480.1
Louisiana	551.3	701.2	804.7	871.3	935.9	971.0	974.4
Oklahoma	536.5	602.8	648.7	697.6	740.5	779.6	798.1
Texas	1,860.7	2.237.2	2.514.4	2.770.3	2.954.2	3.095.7	3.165.8
Mountain	**924.4**	**1,267.8**	**1,587.3**	**1,892.9**	**2,311.9**	**2,535.4**	**2,617.5**
Arizona	210.2	300.3	374.1	447.5	554.1	563.7	566.8
Colorado	296.8	388.4	485.7	586.5	688.8	778.7	810.7
Idaho	0.5	27.0	52.2	79.0	107.5	109.3	108.9
Montana	93.7	118.6	137.6	150.8	173.4	181.1	181.6
Nevada	14.5	24.6	47.8	72.4	112.2	140.4	155.2
New Mexico	136.5	176.6	203.8	231.8	278.9	305.4	317.5
Utah	116.3	166.5	211.9	243.8	297.4	342.9	361.0
Wyoming	55.9	65.8	74.2	81.1	99.5	114.0	115.8
Pacific	**3,827.7**	**4,762.9**	**5,688.9**	**6,461.6**	**7,153.5**	**7,637.5**	**7,831.7**
Alaska	b	b	6.1	17.4	29.1	33.3	39.5
California	3.673.5	4.506.6	5.311.1	5.919.4	6.495.1	6.953.5	7.128.8
Hawaii	b	39.8	36.2	36.1	34.8	33.5	33.3
Oregon	89.7	105.6	146.2	197.5	248.2	259.4	266.1
Washington	64.5	110.9	189.3	291.2	346.3	357.7	364.0

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a. Data show yearly averages. Excludes customers purchasing for resale.
b. Not available.

TABLE 62

GAS UTILITY INDUSTRY HOUSEHEATING CUSTOMERS AND HEATING SATURATIONS[a] BY CENSUS DIVISION, 1955-1979 YEARLY AVERAGES[b]

(Thousands)

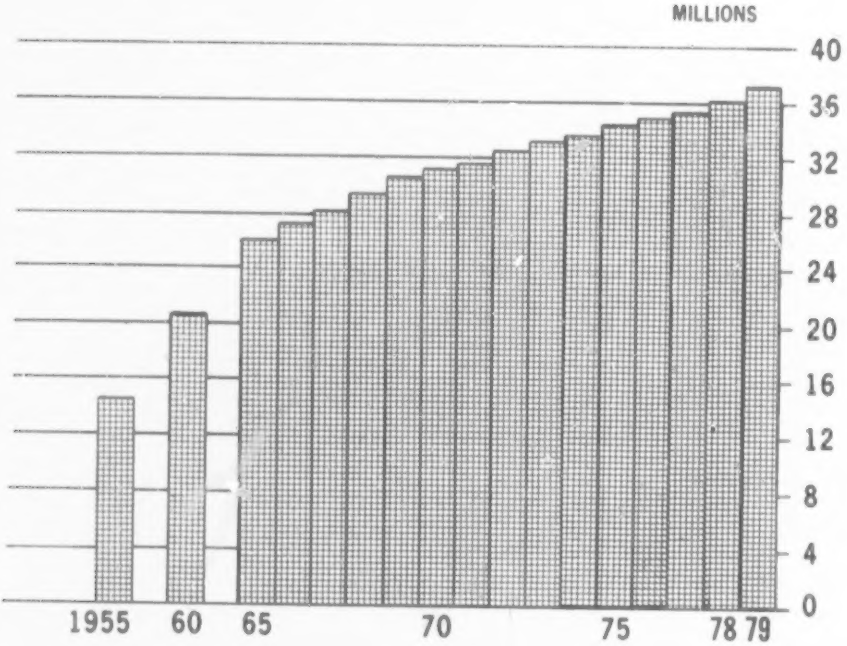
Census Division	1955		1960		1965		1970	
	Customers	Percent	Customers	Percent	Customers	Percent	Customers	Percent
United States	**14,711**	**56.0**	**20,739**	**68.2**	**26,296**	**76.1**	**31,209**	**81.9**
New England	146	9.6	386	25.3	583	36.8	779	48.6
Middle Atlantic	1,665	25.0	2,475	35.1	3,212	43.2	3,827	50.3
East North Central	2,694	45.6	4,369	64.3	6,091	77.6	7,528	85.6
West North Central	1,454	69.7	1,999	82.6	2,485	88.6	2,916	92.2
South Atlantic	1,042	56.4	1,533	66.7	2,073	74.9	2,599	80.9
East South Central	782	76.7	1,161	87.4	1,422	92.4	1,695	96.4
West South Central	2,849	99.2	3,457	99.7	3,900	99.5	4,278	99.0
Mountain	757	91.8	1,081	95.5	1,366	96.4	1,646	97.3
Pacific	3,322	93.7	4,278	97.3	5,165	97.3	5,941	98.3

Census Division	1975		1977		1978		1979	
	Customers	Percent	Customers	Percent	Customers	Percent	Customers	Percent
United States	**34,371**	**84.1**	**35,469**	**85.2**	**36,240**	**85.9**	**37,211**	**86.8**
New England	857	54.8	872	56.2	871	56.0	947	60.2
Middle Atlantic	4,128	54.1	4,189	55.8	4,251	56.8	4,299	57.[illegible]
East North Central	8,432	89.4	8,635	90.3	8,740	90.5	8,944	91.3
West North Central	3,261	94.5	3,371	95.0	3,456	95.7	3,546	96.3
South Atlantic	2,970	84.2	3,042	85.1	3,131	86.8	3,230	88.6
East South Central	1,868	96.5	1,899	97.2	1,917	97.4	1,947	98.3
West South Central	4,496	97.1	4,615	96.9	4,730	97.5	4,894	99.0
Mountain	2,040	98.0	2,182	98.2	2,247	97.9	2,345	98.8
Pacific	6,320	94.6	6,666	95.0	6,898	95.8	7,060	95.6

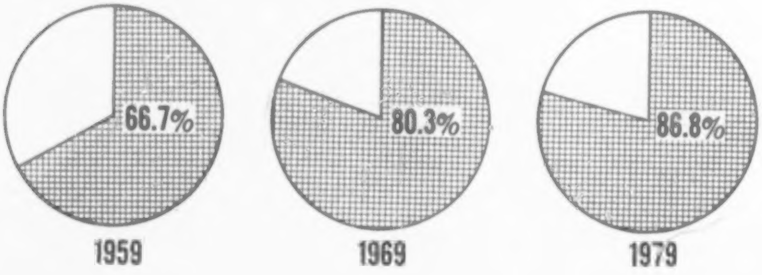
a. Percentages refer to proportion of total residential customers, within specified areas, using gas for heating.
b. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.
Source: *A.G.A. Gas Househeating Survey*. Data represent average number of customers developed from number of year-end customers as shown in survey.

CHART 13

GAS UTILITY INDUSTRY HOUSEHEATING CUSTOMERS



PERCENT OF RESIDENTIAL CUSTOMERS USING GAS FOR HOUSEHEATING



FERENCE TABLE 82

TABLE 63
GAS UTILITY INDUSTRY HOUSEHEATING CUSTOMERS, BY STATE
YEARLY AVERAGES FOR 1965-1979

	1965	1970	1975	1978	1979	
Division and State	Customers	Customers	Customers	Customers	Customers	Percent*
United States	**26,296.0**	**31,208.7**	**34,371.4**	**36,240.3**	**37,211.2**	**86.8**
New England	**582.9**	**778.8**	**857.1**	**870.8**	**946.5**	**60.2**
Connecticut	137.8	181.0	195.8	180.2	207.9	57.5
Maine	5.0	5.7	4.8	4.0	3.8	28.8
Massachusetts	354.5	443.3	531.5	557.8	589.6	60.0
New Hampshire	19.9	24.2	28.0	27.7	37.2	77.8
Rhode Island	65.4	116.0	86.3	90.4	95.5	62.8
Vermont	0.3	8.6	10.7	10.7	12.5	96.2
Middle Atlantic	**3,212.4**	**3,827.2**	**4,127.7**	**4,251.1**	**4,298.8**	**57.3**
New Jersey	550.8	713.7	793.4	836.9	882.0	53.3
New York	1,328.5	1,536.7	1,686.2	1,699.8	1,707.1	46.4
Pennsylvania	1,333.1	1,576.8	1,648.1	1,714.4	1,709.7	79.0
East North Central	**6,090.6**	**7,527.9**	**8,432.0**	**8,739.7**	**8,943.8**	**91.3**
Illinois	1,671.0	2,107.4	2,390.9	2,523.6	2,545.5	84.5
Indiana	588.9	813.0	947.6	984.2	1,017.0	90.8
Michigan	1,310.6	1,647.3	1,901.2	2,022.8	2,093.8	94.9
Ohio	2,108.5	2,379.2	2,482.0	2,439.4	2,487.5	98.5
Wisconsin	411.6	581.0	710.3	769.7	800.0	86.6
West North Central	**2,485.0**	**2,915.5**	**3,260.7**	**3,456.4**	**3,546.4**	**96.3**
Iowa	419.7	515.8	572.9	603.3	639.3	96.5
Kansas	513.0	563.4	595.4	636.3	647.4	99.8
Minnesota	430.6	513.1	598.3	641.3	660.7	92.9
Missouri	762.4	915.6	1,022.8	1,066.3	1,079.0	96.1
Nebraska	266.7	298.4	336.2	360.8	367.3	97.6
North Dakota	33.0	41.8	56.5	65.2	67.6	93.0
South Dakota	59.6	67.4	78.6	83.2	85.1	96.5
South Atlantic	**2,072.6**	**2,599.2**	**2,969.9**	**3,131.0**	**3,230.0**	**88.6**
Delaware	31.5	42.5	46.6	45.8	46.4	61.6
District of Columbia	80.1	83.2	86.1	87.1	89.0	66.6
Florida	182.0	247.9	261.7	317.1	360.7	91.4
Georgia	595.0	718.9	810.7	869.5	911.5	99.0
Maryland	357.0	443.3	528.8	531.3	540.8	75.7
North Carolina	138.8	209.6	274.4	279.5	282.1	89.7
South Carolina	106.8	179.7	226.9	251.2	253.0	97.2
Virginia	265.5	339.0	378.3	395.0	389.7	82.2
West Virginia	315.9	335.1	356.4	354.5	356.8	99.0
East South Central	**1,421.7**	**1,695.1**	**1,868.0**	**1,916.8**	**1,947.3**	**98.3**
Alabama	449.4	539.2	579.9	604.5	616.1	99.4
Kentucky	402.5	490.1	538.0	540.1	560.5	98.6
Mississippi	272.8	311.0	341.8	350.7	353.4	100.0
Tennessee	297.0	354.8	408.3	421.5	417.3	95.2
West South Central	**3,899.5**	**4,278.3**	**4,496.0**	**4,729.7**	**4,893.6**	**99.0**
Arkansas	316.5	371.0	405.8	414.8	424.5	99.9
Louisiana	739.3	737.3	859.3	896.2	902.9	99.6
Oklahoma	583.9	628.3	665.7	701.4	720.1	99.8
Texas	2,259.8	2,541.7	2,565.2	2,717.3	2,846.1	98.6
Mountain	**1,366.3**	**1,646.2**	**2,040.4**	**2,246.8**	**2,345.0**	**98.8**
Arizona	320.3	390.0	492.4	489.7	507.7	97.3
Colorado	418.2	508.7	610.9	693.8	724.1	100.0
Idaho	39.5	65.9	91.4	92.7	83.3	88.7
Montana	115.2	126.9	147.1	153.9	161.5	100.0
Nevada	43.5	65.9	100.7	128.8	147.2	98.8
New Mexico	179.6	203.4	239.4	269.9	280.7	99.4
Utah	187.2	217.6	272.6	317.8	338.3	100.0
Wyoming	62.8	67.8	85.9	100.2	102.2	99.9
Pacific	**5,165.0**	**5,940.5**	**6,319.6**	**6,898.0**	**7,059.8**	**95.6**
Alaska	4.9	14.4	24.0	29.0	34.2	100.0
California	4,906.1	5,506.9	5,794.5	6,347.7	6,497.0	96.6
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	106.2	166.3	206.7	218.3	218.0	93.4
Washington	147.9	252.9	294.4	303.0	310.6	97.2

*Percentages refer to proportion of residential gas customers using gas for heating.

Source: *A.G.A. Gas Househeating Survey*. Data represent average number of customers developed from number of year-end customers as shown in survey.

CUSTOMERS

TABLE 64
GAS UTILITY INDUSTRY CUSTOMERS, BY QUARTERS, 1955-1979

(Thousands)

Year and Quarter	Total	Residential	Commercial	Industrial*	Other*
1955					
First	27,969	25,768	2,055	119	27
Second	27,954	25,818	1,988	121	27
Third	28,084	25,979	1,957	121	27
Fourth	28,946	26,691	2,105	123	27
1960					
First	32,882	30,220	2,486	139	37
Second	32,685	30,098	2,409	141	37
Third	32,638	30,099	2,363	140	36
Fourth	33,508	30,802	2,524	141	41
1965					
First	37,174	34,156	2,814	163	41
Second	36,963	34,014	2,743	165	41
Third	36,932	34,021	2,704	167	40
Fourth	37,967	34,886	2,870	169	42
1970					
First	41,491	38,063	3,175	199	54
Second	41,419	38,058	3,109	199	53
Third	41,080	37,773	3,054	198	55
Fourth	41,939	38,494	3,186	201	[illegible]
1971					
First	42,278	38,794	3,219	205	59
Second	42,054	38,628	3,176	204	45
Third	41,929	38,540	3,139	204	45
Fourth	42,706	39,189	3,262	206	47
1972					
First	43,072	39,489	3,302	213	67
Second	42,687	39,204	3,228	211	45
Third	42,740	39,292	3,196	198	55
Fourth	43,320	39,727	3,329	215	48
1973					
First	43,789	40,135	3,372	208	72
Second	43,422	39,865	3,298	213	45
Third	43,432	39,910	3,268	201	53
Fourth	44,201	40,551	3,387	215	46
1974					
First	44,390	40,713	3,430	194	53
Second	43,978	40,371	3,360	194	53
Third	44,011	40,433	3,331	192	55
Fourth	44,690	40,990	3,446	196	58
1975					
First	44,762	41,099	3,406	194	63
Second	44,386	40,806	3,348	181	51
Third	44,233	40,686	3,322	177	48
Fourth	44,839	41,210	3,393	182	54
1976					
First	45,088	41,437	3,417	181	53
Second	44,924	41,311	3,380	180	53
Third	44,628	41,084	3,313	179	52
Fourth	45,128	41,519	3,377	179	53
1977					
First	45,689	42,005	3,454	175	55
Second	45,047	41,476	3,347	173	51
Third	44,633	41,140	3,282	170	41
Fourth	45,725	42,108	3,400	175	42
1978					
First	45,931	42,285	3,410	190	47
Second	45,761	42,149	3,376	190	47
Third	45,468	41,918	3,316	188	46
Fourth	45,996	42,382	3,378	189	47
1979					
First	46,553	42,869	3,449	190	45
Second	46,410	42,754	3,422	190	45
Third	46,242	42,635	3,375	189	44
Fourth	46,708	43,027	3,446	189	45

*Prior to 1976, "Other" electric generation (see Table 72) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

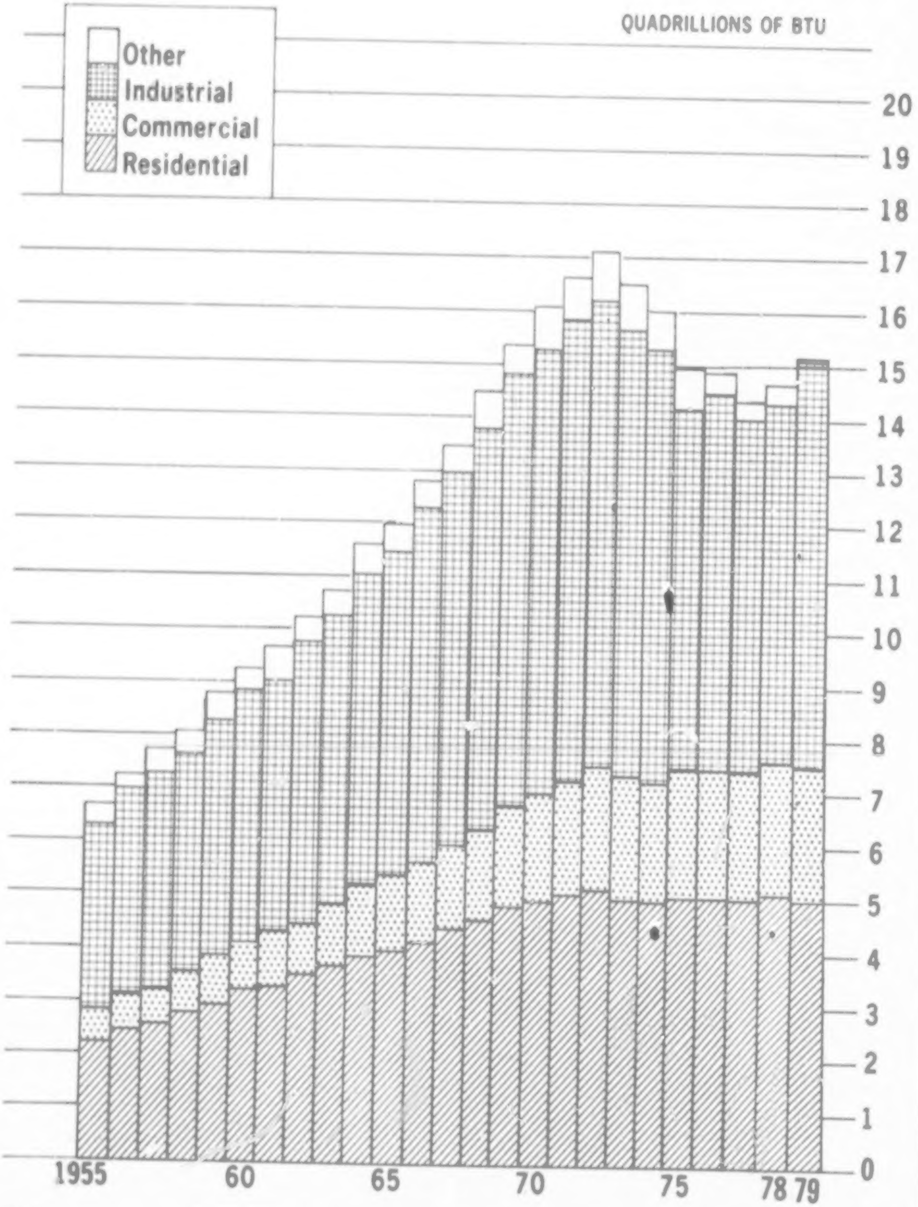
SECTION VIII
SALES-QUANTITIES

	1979	% Change 79/78
Gas Utility Industry		
(Trillions of Btu)		
Total	15,440.3	+ 4.7
Residential	5,083.1	− 0.5
Commercial	2,485.8	− 0.6
Industrial	7,555.0	+10.4
Other	316.4	+ 5.1
Resale	15,512.2	+ 9.6
Electric Generation	1,558.8	+19.2

CHART 14

GAS UTILITY INDUSTRY SALES

BY CLASS OF SERVICE



EFERENCE: TABLE 85

TABLE 65
GAS UTILITY INDUSTRY SALES, BY CLASS OF SERVICE, 1955-1979[a]

(Trillions of Btu)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1955	6,658.6	2,238.7	602.9	3,535.1	281.9
1956	7,254.2	2,464.3	655.8	3,868.7	265.4
1957	7,703.5	2,598.5	698.9	4,047.6	358.5
1958	8,028.6	2,812.5	764.9	4,076.4	374.8
1959	8,791.8	2,973.9	827.5	4,563.1	427.3
1960	9,287.7	3,188.1	919.8	4,709.4	470.4
1961	9,589.0	3,321.0	988.1	4,785.6	494.3
1962	10,234.8	3,536.9	1,092.9	5,100.1	504.9
1963	10,766.3	3,668.0	1,136.6	5,438.1	523.6
1964	11,591.2	3,869.7	1,273.5	5,912.0	536.0
1965	11,980.3	3,999.0	1,344.8	6,146.5	490.0
1966	12,859.1	4,175.4	1,462.8	6,653.3	567.6
1967	13,488.3	4,365.3	1,577.6	7,014.3	531.1
1968	14,472.4	4,552.7	1,704.9	7,595.1	619.7
1969	15,391.6	4,820.4	1,878.1	8,135.8	557.3
1970	16,043.9	4,923.7	2,006.6	8,439.2	674.0
1971	16,685.7	5,040.1	2,155.5	8,645.5	844.7
1972	17,082.1	5,141.8	2,275.7	8,775.7	888.0
1973	16,479.9	4,993.6	2,280.8	8,370.8	834.7
1974	16,000.3	4,864.8	2,293.4	8,153.2	689.0
1975	14,862.9	4,991.0	2,386.8	6,837.1	648.0
1976	14,813.5	5,014.2	2,422.6	7,107.0	269.6
1977	14,340.9	4,946.3	2,409.4	6,710.7	274.6
1978	14,748.4	5,106.7	2,499.5	6,841.2	301.0
1979	15,440.3	5,083.1	2,485.8	7,555.0	316.4

a. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.
b. Prior to 1976, "Other" electric generation (see Table 72) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

TABLE 66
GAS UTILITY INDUSTRY SALES, BY STATE AND CLASS OF SERVICE, 1979

(Trillions of Btu)

Division and State	Total	Class of Service				Average Btu Value	Electric Generation Included[b]
		Residential	Commercial	Industrial[a]	Other		
United States	**15,440.3**	**5,083.1**	**2,485.8**	**7,555.0**	**316.4**	**1,020.8**	**1,558.8**
New England	**285.6**	**137.3**	**73.0**	**71.7**	**3.6**	**1,010.1**	**9.3**
Connecticut	68.7	31.8	17.8	19.2	c	1,011.7	0.0
Maine	1.9	.5	.6	.7	0.0	1,000.0	0.0
Massachusetts	173.5	86.0	47.1	37.5	2.9	1,009.1	7.5
New Hampshire	8.9	4.0	2.2	2.0	.6	1,040.0	0.0
Rhode Island	28.0	13.6	4.4	9.9	0.0	1,011.3	1.8
Vermont	4.7	1.4	.8	2.4	c	1,010.1	0.0
Middle Atlantic	**1,593.2**	**775.3**	**281.3**	**504.4**	**32.2**	**1,021.6**	**13.1**
New Jersey	288.1	143.8	62.8	81.3	.3	1,035.9	9.0
New York	588.2	336.1	111.6	118.6	21.9	1,015.5	2.8
Pennsylvania	716.9	295.4	106.9	304.5	10.0	1,020.6	1.2
East North Central	**3,901.6**	**1,642.0**	**747.7**	**1,501.8**	**10.1**	**1,014.7**	**77.5**
Illinois	1,193.5	530.1	250.2	412.2	1.0	1,024.4	27.4
Indiana	492.3	174.0	71.5	244.8	2.0	990.4	0.2
Michigan	889.4	388.4	191.1	310.0	c	1,005.3	28.5
Ohio	960.5	423.1	170.5	360.0	6.9	1,024.9	3.3
Wisconsin	365.9	126.6	64.3	174.8	.2	1,012.9	18.1
West North Central	**1,488.9**	**550.2**	**312.5**	**615.1**	**11.1**	**989.3**	**80.2**
Iowa	267.2	96.6	57.4	112.3	.9	1,002.3	2.6
Kansas	383.2	94.8	50.3	232.8	5.3	977.8	47.2
Minnesota	276.7	110.8	50.9	111.9	3.1	995.3	1.0
Missouri	349.9	166.8	96.3	85.3	1.5	979.5	18.2
Nebraska	160.3	57.1	37.7	65.4	.1	993.8	11.1
North Dakota	25.1	11.6	11.5	1.9	.1	1,000.0	0.0
South Dakota	26.5	12.5	8.4	5.5	.1	995.6	0.1
South Atlantic	**1,235.6**	**348.1**	**206.4**	**614.5**	**66.6**	**1,033.0**	**30.4**
Delaware	20.8	7.2	3.2	9.4	.9	1,031.1	0.0
Dist. of Columbia	25.8	13.6	10.4	1.8	0.0	1,016.0	0.0
Florida	223.0	18.5	26.6	125.8	52.2	1,037.3	26.5
Georgia	292.8	90.5	54.4	145.2	2.7	1,039.0	3.4
Maryland	152.7	70.3	22.2	60.1	.1	1,044.8	0.0
North Carolina	122.5	30.7	21.1	69.5	1.2	1,021.9	0.3
South Carolina	132.0	20.7	16.0	87.9	7.4	1,018.1	0.2
Virginia	128.2	47.7	28.8	49.6	2.1	1,021.4	0.0
West Virginia	137.9	48.9	23.7	65.2	.1	1,023.7	0.0
East South Central	**798.7**	**212.6**	**114.8**	**451.7**	**19.6**	**1,024.9**	**37.9**
Alabama	234.1	54.6	27.9	150.9	.8	1,028.4	c
Kentucky	184.4	78.6	33.9	65.1	6.8	1,009.9	0.0
Mississippi	162.9	31.4	16.1	106.6	8.8	1,024.3	37.9
Tennessee	217.2	48.0	36.9	129.1	3.2	1,032.6	0.0
West South Central	**3,220.4**	**458.6**	**254.0**	**2,362.5**	**145.3**	**1,031.0**	**719.2**
Arkansas	207.6	46.9	28.6	130.9	1.2	1,017.0	2.4
Louisiana	562.6	77.1	28.3	444.2	13.0	1,036.9	75.3
Oklahoma	490.7	83.6	48.4	356.7	2.0	1,023.5	163.9
Texas	1,959.5	251.0	148.7	1,430.7	129.1	1,032.5	477.6
Mountain	**907.5**	**278.1**	**175.0**	**434.8**	**19.6**	**980.4**	**137.9**
Arizona	147.0	34.4	21.8	88.3	2.5	1,045.4	13.3
Colorado	254.5	97.7	71.5	84.3	1.0	892.4	33.2
Idaho	50.4	8.8	10.0	31.5	0.0	1,047.1	0.0
Montana	64.8	25.0	17.1	19.9	2.8	990.1	0.0
Nevada	75.3	14.5	10.8	49.7	.4	1,013.1	41.7
New Mexico	134.7	30.8	16.7	75.4	11.8	1,056.4	43.7
Utah	123.8	51.5	15.7	56.6	c	959.8	6.0
Wyoming	57.0	15.4	11.4	29.1	1.1	929.2	0.0
Pacific	**2,008.8**	**680.9**	**321.1**	**998.5**	**8.3**	**1,049.1**	**453.3**
Alaska	30.3	6.9	7.2	11.2	5.0	1,000.0	11.2
California	1,728.8	617.4	262.0	847.0	2.5	1,049.7	440.0
Hawaii	3.5	.8	1.0	1.8	0.0	950.0	0.0
Oregon	92.4	21.1	16.6	54.7	0.0	1,044.8	0.0
Washington	153.7	34.8	34.3	83.8	0.8	1,046.9	2.0

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a. Includes Electric Generation.
b. Included in Industrial.
c. Less than 0.05 trillion Btu.

SALES—QUANTITIES

TABLE 67
GAS UTILITY INDUSTRY SALES, BY STATE, 1955-1979[a]

(Trillions of Btu)

Division and State	1955	1960	1965	1970	1975	1977	1978	1979
United States	**6,658.6**	**9,287.7**	**11,980.3**	**16,043.5**	**14,862.9**	**14,340.9**	**14,748.4**	**15,440.3**
New England	**65.4**	**120.5**	**172.0**	**236.7**	**243.5**	**260.8**	**268.8**	**285.6**
Connecticut	17.4	31.5	44.0	61.4	61.0	64.1	65.8	68.7
Maine	1.3	1.3	1.3	1.8	2.0	2.0	2.0	1.9
Massachusetts	39.7	72.4	105.0	139.5	145.9	159.1	164.7	173.5
New Hampshire	1.4	3.0	4.3	6.7	7.8	8.2	8.3	8.9
Rhode Island	5.2	11.9	16.9	25.2	23.4	23.8	23.9	28.0
Vermont	0.4	0.4	0.5	2.1	3.4	3.6	4.1	4.7
Middle Atlantic	**693.5**	**993.9**	**1,293.4**	**1,651.0**	**1,495.1**	**1,479.5**	**1,532.3**	**1,593.2**
New Jersey	68.9	125.9	194.1	294.9	257.9	259.4	264.5	288.1
New York	233.0	358.0	475.6	595.9	581.9	578.5	587.9	588.2
Pennsylvania	391.6	510.0	623.7	760.2	655.4	641.6	679.9	716.9
East North Central	**1,276.1**	**1,872.4**	**2,724.4**	**3,896.4**	**3,749.5**	**3,605.7**	**3,813.7**	**3,901.6**
Illinois	386.4	509.5	746.5	1,140.3	1,112.4	1,134.1	1,178.5	1,193.5
Indiana	121.1	203.9	344.6	505.0	458.8	431.7	448.7	492.3
Michigan	193.4	357.2	545.3	839.4	885.8	846.8	898.3	889.4
Ohio	533.4	712.5	891.0	1,084.9	929.8	871.7	938.3	960.5
Wisconsin	41.8	89.3	197.0	326.8	362.7	321.4	349.9	365.9
West North Central	**772.9**	**1,040.4**	**1,316.0**	**1,743.7**	**1,592.4**	**1,444.5**	**1,465.5**	**1,488.9**
Iowa	105.9	157.7	205.6	292.5	298.8	268.1	262.7	267.2
Kansas	245.0	305.6	350.4	459.5	410.4	389.7	383.1	383.2
Minnesota	110.6	160.4	230.9	324.3	295.0	248.9	260.7	276.7
Missouri	192.6	257.2	333.2	421.0	344.5	333.7	350.8	349.9
Nebraska	96.3	126.7	153.7	197.8	187.2	154.0	156.7	160.3
North Dakota	5.2	8.5	15.6	18.9	24.7	22.9	24.4	25.1
South Dakota	17.5	24.3	26.6	29.7	31.8	27.2	27.1	26.5
South Atlantic	**392.7**	**649.8**	**871.8**	**1,311.1**	**1,106.1**	**1,014.5**	**1,090.7**	**1,235.6**
Delaware	2.8	8.9	16.6	24.3	19.3	17.7	19.2	20.8
District of Columbia	15.5	18.5	21.8	27.1	24.8	25.6	26.6	25.8
Florida	30.6	91.1	144.2	218.7	127.4	140.3	168.1	223.0
Georgia	136.0	188.5	210.3	333.8	312.5	261.0	277.7	292.8
Maryland	40.3	65.9	96.8	145.1	138.8	137.2	143.4	152.7
North Carolina	11.5	41.6	73.9	151.2	104.8	79.0	84.9	122.5
South Carolina	13.2	40.6	73.9	120.1	118.3	104.8	113.9	132.0
Virginia	40.0	64.3	91.3	133.9	116.0	114.6	115.2	128.2
West Virginia	102.8	130.4	143.0	156.9	144.3	134.3	141.6	137.9
East South Central	**465.8**	**600.1**	**729.7**	**995.4**	**752.8**	**702.2**	**711.2**	**798.7**
Alabama	149.3	180.3	224.8	290.0	227.9	215.6	219.7	234.1
Kentucky	82.7	126.6	142.1	189.9	180.0	162.4	169.8	184.4
Mississippi	118.2	146.2	177.1	265.6	141.3	135.5	133.2	162.9
Tennessee	115.6	147.0	185.7	249.9	203.5	188.7	188.5	217.2
West South Central	**1,758.2**	**2,216.5**	**2,408.5**	**3,031.0**	**2,973.6**	**3,087.5**	**3,232.8**	**3,220.4**
Arkansas	166.3	177.3	228.6	339.9	219.4	195.8	197.2	207.6
Louisiana	414.4	536.8	592.0	742.1	457.3	487.5	512.9	562.6
Oklahoma	187.5	248.8	255.0	275.6	417.9	452.6	506.9	490.7
Texas	990.0	1,253.6	1,332.9	1,673.4	1,878.9	1,951.5	2,015.8	1,959.5
Mountain	**394.6**	**576.4**	**703.8**	**936.1**	**928.6**	**875.9**	**885.5**	**907.5**
Arizona	78.5	110.9	127.3	168.1	144.4	137.7	155.9	147.0
Colorado	125.0	160.0	196.5	253.6	269.2	236.3	252.2	254.5
Idaho	0.0	22.0	34.8	43.1	51.2	49.9	47.0	50.4
Montana	43.5	51.3	67.4	78.8	79.8	65.8	65.1	64.8
Nevada	3.2	14.2	29.7	56.0	61.3	65.0	54.3	75.3
New Mexico	66.9	112.9	106.2	135.6	142.5	148.4	136.9	134.7
Utah	52.3	73.1	101.8	119.1	119.4	118.4	118.4	123.8
Wyoming	25.2	32.0	40.1	71.8	60.8	54.4	55.7	57.0
Pacific	**839.4**	**1,217.7**	**1,760.7**	**2,252.1**	**2,021.3**	**1,870.4**	**1,748.1**	**2,008.8**
Alaska	b	b	5.2	16.6	30.7	29.1	27.4	30.3
California	830.2	1,115.4	1,580.1	1,986.8	1,735.6	1,595.9	1,487.7	1,728.8
Hawaii	b	1.6	2.0	2.8	3.6	3.5	3.5	3.5
Oregon	5.8	32.0	59.0	88.1	86.8	90.7	88.6	92.4
Washington	3.4	68.7	114.4	157.8	164.6	151.1	140.9	153.7

a. Excludes sales for resale.
b. Not available.

TABLE 68
GAS UTILITY INDUSTRY SALES, BY CLASS OF SERVICE AND TYPE OF COMPANY
1975-1979*

(Trillions of Btu)

	1975	1976	1977	1978	1979
Distribution					
Total	4,025	4,156	3,851	4,026	4,151
Residential	1,769	1,825	1,782	1,873	1,797
Commercial	825	854	830	880	899
Industrial	1,391	1,442	1,220	1,246	1,424
Other	40	35	19	28	31
Transmission					
Total	1,498	1,883	1,934	2,016	2,059
Residential	2	2	2	2	2
Commerical	7	6	5	4	4
Industrial	1,235	1,762	1,808	1,888	1,949
Other	252	113	119	122	105
Integrated					
Total	4,775	4,257	4,303	4,411	4,724
Residential	1,390	1,358	1,390	1,428	1,458
Commercial	696	708	694	704	698
Industrial	2,626	2,147	2,149	2,209	2,455
Other	63	44	69	70	113
Combination					
Total	3,878	3,860	3,623	3,631	3,807
Residential	1,526	1,527	1,470	1,485	1,519
Commercial	731	727	753	781	756
Industrial	1,355	1,553	1,357	1,311	1,491
Other	266	53	42	54	42
Municipals					
Total	689	659	630	664	698
Residential	304	302	301	319	308
Commerical	127	127	128	131	129
Industrial	231	204	176	187	236
Other	27	25	25	27	28

*Prior to 1976 "Other" electric generation is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

SALES—QUANTITIES

TABLE 69
GAS UTILITY INDUSTRY SALES OF GAS FOR RESALE, BY STATE
1955-1979

(Trillions of Btu)

Division and State	1955*	1960*	1965*	1970	1975	1978	1979
United States	**6,122.6**	**9,257.8**	**12,566.4**	**17,575.6**	**14,504.5**	**14,149.4**	**15,512.2**
New England	**72.5**	**135.5**	**194.0**	**276.0**	**271.5**	**296.1**	**294.5**
Connecticut				83.0	82.7	88.5	90.9
Maine				0.0	0.0	0.0	0.0
Massachusetts				156.6	160.0	177.4	171.7
New Hampshire				8.6	5.8	5.8	5.8
Rhode Island				27.8	21.8	24.5	26.1
Vermont				0.0	1.3	0.0	0.0
Middle Atlantic	**816.3**	**1,337.4**	**1,827.4**	**2,433.3**	**1,901.6**	**1,968.5**	**2,116.4**
New Jersey				491.9	370.2	400.2	421.8
New York				802.5	572.2	568.7	628.4
Pennsylvania				1,138.9	959.2	999.6	1,066.2
East North Central	**1,403.5**	**1,999.8**	**3,296.3**	**5,249.0**	**4,542.8**	**4,505.0**	**4,705.8**
Illinois				1,688.6	1,537.1	1,506.7	1,624.5
Indiana				513.6	406.8	446.0	481.2
Michigan				698.5	759.4	739.1	699.7
Ohio				1,892.4	1,356.1	1,362.5	1,420.0
Wisconsin				455.9	483.4	450.8	480.4
West North Central	**574.7**	**759.7**	**975.2**	**1,306.9**	**1,144.5**	**1,080.5**	**1,105.2**
Iowa				271.0	259.7	223.8	228.1
Kansas				206.4	169.7	174.9	165.0
Minnesota				272.6	239.0	212.9	246.7
Missouri				405.2	338.0	356.7	353.1
Nebraska				124.7	111.7	90.0	89.4
North Dakota				5.2	5.5	4.8	5.1
South Dakota				21.8	20.8	17.4	17.9
South Atlantic	**774.3**	**1,223.6**	**1,605.2**	**1,981.1**	**1,372.5**	**1,346.1**	**1,441.7**
Delaware				1.1	1.2	1.2	1.2
District of Columbia				0.0	0.0	0.0	0.0
Florida				63.4	82.7	93.4	93.4
Georgia				327.0	315.5	292.9	306.2
Maryland				183.1	151.0	167.5	190.1
North Carolina				157.9	118.5	82.1	128.9
South Carolina				166.5	127.6	114.0	126.4
Virginia				218.3	181.9	215.7	207.1
West Virginia				863.8	394.1	379.3	388.4
East South Central	**757.0**	**1,009.5**	**1,116.2**	**1,573.5**	**1,178.0**	**1,143.8**	**1,323.9**
Alabama				237.0	219.3	208.0	236.5
Kentucky				417.6	238.4	234.5	244.4
Mississippi				349.3	263.1	253.1	349.1
Tennessee				569.6	457.3	448.1	493.9
West South Central	**836.4**	**1,199.7**	**1,136.4**	**1,497.3**	**1,215.9**	**1,221.3**	**1,577.4**
Arkansas				22.6	16.1	14.6	16.5
Louisiana				854.6	569.2	569.6	636.1
Oklahoma				166.6	148.6	167.6	163.8
Texas				453.6	482.1	469.4	761.0
Mountain	**755.3**	**1,304.2**	**1,562.0**	**2,021.0**	**1,901.8**	**1,690.9**	**1,922.3**
Arizona				1,477.8	1,341.0	1,150.2	1,290.8
Colorado				249.0	279.6	288.7	359.9
Idaho				73.0	84.2	67.9	86.9
Montana				7.5	7.7	7.6	18.3
Nevada				5.8	9.5	10.2	9.7
New Mexico				104.9	71.8	56.5	55.3
Utah				21.3	7.4	8.9	11.5
Wyoming				81.6	100.6	100.9	89.8
Pacific	**132.6**	**288.4**	**853.7**	**1,237.6**	**975.9**	**897.2**	**1,024.9**
Alaska				0.0	0.0	0.0	0.0
California				680.5	346.5	318.8	388.0
Hawaii				0.0	0.0	0.0	0.0
Oregon				399.9	470.2	439.5	477.6
Washington				157.2	159.1	138.8	159.3

*Includes natural gas only prior to 1970 and state breakdowns not available prior to 1970.

TABLE 70
GAS UTILITY INDUSTRY FIRM AND INTERRUPTIBLE GAS SALES BY STATE, 1979

(Trillions of Btu)

	Commercial			Industrial[a]		
Division and State	Total	Firm	Interruptible	Total	Firm	Interruptible
United States	**2,485.8**	**2,341.9**	**143.8**	**7,555.0**	**4,430.3**	**3,124.7**
New England	**73.0**	**64.4**	**8.5**	**71.7**	**41.3**	**30.5**
Connecticut	17.8	16.8	1.0	19.2	17.0	2.2
Maine	0.6	0.6	0.0	0.7	0.6	0.1
Massachusetts	47.1	39.6	7.5	37.5	16.8	20.8
New Hampshire	2.2	2.2	0.0	2.0	1.6	0.4
Rhode Island	4.4	4.3	0.1	9.9	3.0	7.0
Vermont	0.8	0.8	0.0	2.4	2.4	0.0
Middle Atlantic	**281.3**	**273.5**	**7.7**	**504.4**	**414.3**	**90.1**
New Jersey	62.8	56.6	6.2	81.3	47.6	33.7
New York	111.6	110.4	1.2	118.6	91.0	27.7
Pennsylvania	106.9	106.5	0.4	304.5	275.8	28.7
East North Central	**747.7**	**727.7**	**19.9**	**1,501.8**	**1,225.3**	**276.5**
Illinois	250.2	249.5	0.7	412.2	359.1	53.1
Indiana	71.5	67.4	4.2	244.8	214.7	30.1
Michigan	191.1	188.6	2.5	310.0	244.7	65.2
Ohio	170.5	169.1	1.4	360.0	331.6	28.4
Wisconsin	64.3	53.1	11.2	174.8	75.1	99.7
West North Central	**312.5**	**262.0**	**50.7**	**615.1**	**244.9**	**370.3**
Iowa	57.4	44.4	13.0	112.3	71.2	41.1
Kansas	50.3	42.6	7.8	232.8	66.7	166.0
Minnesota	50.9	46.2	4.8	111.9	43.5	68.4
Missouri	96.3	77.9	18.3	85.3	19.8	65.5
Nebraska	37.7	34.8	2.9	65.4	43.0	22.4
North Dakota	11.5	8.6	2.9	1.9	0.0	1.9
South Dakota	8.4	7.5	1.0	5.5	0.5	5.0
South Atlantic	**206.4**	**200.7**	**5.6**	**614.5**	**283.5**	**331.0**
Delaware	3.2	3.1	0.2	9.4	7.7	1.7
District of Columbia	10.4	10.4	0.0	1.8	0.0	1.8
Florida	26.6	26.1	0.5	125.8	36.4	89.4
Georgia	54.4	54.2	0.2	145.2	20.0	125.2
Maryland	22.2	22.2	0.0	60.1	22.8	37.3
North Carolina	21.1	21.1	0.0	69.5	53.8	15.7
South Carolina	16.0	12.5	3.5	87.9	43.8	44.1
Virginia	28.8	27.6	1.2	49.6	35.0	14.6
West Virginia	23.7	23.6	0.1	65.2	64.0	1.2
East South Central	**114.8**	**105.5**	**9.3**	**451.7**	**288.3**	**163.3**
Alabama	27.9	23.8	4.1	150.9	78.6	72.3
Kentucky	33.9	30.6	3.3	65.1	36.8	28.2
Mississippi	16.1	16.1	b	106.6	95.9	10.8
Tennessee	36.9	35.1	1.9	129.1	77.1	52.0
West South Central	**254.0**	**246.9**	**7.1**	**2,362.5**	**1,618.0**	**744.4**
Arkansas	28.6	28.3	0.3	130.9	118.2	12.7
Louisiana	28.3	28.3	b	444.2	319.2	125.1
Oklahoma	48.4	43.3	5.1	356.7	247.9	108.8
Texas	148.7	147.0	1.7	1,430.7	932.9	497.8
Mountain	**175.0**	**173.2**	**1.9**	**434.8**	**216.7**	**218.1**
Arizona	21.8	21.8	0.0	88.3	85.7	2.6
Colorado	71.5	71.1	0.4	84.3	16.8	67.5
Idaho	10.0	9.5	0.5	31.5	26.8	4.7
Montana	17.1	16.7	0.4	19.9	1.3	18.6
Nevada	10.8	10.8	0.0	49.7	49.7	0.0
New Mexico	16.7	16.1	0.6	75.4	16.1	59.3
Utah	15.7	15.7	0.0	56.6	13.8	42.8
Wyoming	11.4	11.4	b	29.1	6.5	22.6
Pacific	**321.1**	**288.0**	**33.1**	**998.5**	**97.9**	**900.5**
Alaska	7.2	7.2	0.0	11.2	11.2	0.0
California	262.0	239.0	23.0	847.0	24.7	822.3
Hawaii	1.0	1.0	0.0	1.8	1.8	0.0
Oregon	16.6	16.0	0.6	54.7	25.8	28.9
Washington	34.3	24.8	9.5	83.8	34.4	49.3

a. Includes Electric Generation.
b. Less than 0.05 trillion Btu.

TABLE 71
GAS CONSUMED FOR ELECTRIC GENERATION,* BY STATE, 1955-1979

(Millions of Cubic Feet)

Division and State	1955	1960	1965	1970	1975	1978R	1979
United States	**1,153,280**	**1,724,762**	**2,321,101**	**3,931,860**	**3,146,874**	**3,188,365**	**3,490,523**
New England	**9,495**	**12,885**	**13,918**	**8,133**	**2,523**	**1,596**	**9,202**
Connecticut	852	1,756	337	147	344	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	8,532	10,785	13,098	5,668	1,437	1,557	6,886
New Hampshire	0	0	0	0	177	0	30
Rhode Island	111	344	483	2,319	11	0	1,752
Vermont	0	0	0	0	555	39	534
Middle Atlantic	**42,821**	**89,288**	**97,850**	**161,385**	**23,426**	**2,431**	**108,553**
New Jersey	14,064	25,482	22,440	45,891	8,601	770	75,964
New York	25,497	57,819	74,189	106,141	13,613	1,222	30,727
Pennsylvania	3,260	5,987	1,221	9,354	1,213	439	1,862
East North Central	**66,881**	**61,407**	**68,232**	**278,143**	**118,394**	**73,547**	**98,998**
Illinois	55,525	42,348	34,618	132,382	34,176	22,567	31,547
Indiana	6,565	8,790	13,272	29,507	10,994	3,143	2,774
Michigan	332	5,209	2,989	64,270	47,151	36,384	37,860
Ohio	4,403	2,992	2,947	21,380	6,139	3,141	5,604
Wisconsin	56	2,068	14,406	30,604	19,935	8,312	21,213
West North Central	**178,975**	**245,084**	**303,618**	**420,086**	**264,825**	**167,966**	**166,664**
Iowa	40,317	48,587	52,238	77,910	46,929	8,177	8,333
Kansas	60,071	82,195	112,955	167,885	127,818	118,094	116,828
Minnesota	31,232	48,521	51,420	58,954	22,709	1,536	6,966
Missouri	22,679	30,251	47,552	62,970	26,320	27,269	20,383
Nebraska	21,046	30,973	36,269	47,641	37,659	12,844	14,009
North Dakota	216	103	25	362	157	21	17
South Dakota	3,414	4,454	3,359	4,364	3,232	24	129
South Atlantic	**62,076**	**147,439**	**117,395**	**343,408**	**199,105**	**172,124**	**194,824**
Delaware	1,666	3,190	4,611	3,744	1,697	1,485	5,143
District of Colmbia	0	0	0	0	0	0	0
Florida	7,935	88,518	87,001	198,367	141,153	158,042	167,444
Georgia	34,880	25,336	831	58,674	40,282	5,881	3,023
Maryland	79	78	56	11,435	451	519	9,820
North Carolina	0	4,660	2,895	21,126	101	4	591
South Carolina	15,487	23,278	18,801	45,081	14,566	5,184	5,177
Virginia	662	1,438	2,268	4,276	496	995	3,557
West Virginia	1,367	941	932	705	358	14	69
East South Central	**58,938**	**53,249**	**78,626**	**140,940**	**37,774**	**51,469**	**72,051**
Alabama	17,314	9,378	5,561	15,444	5,894	7,015	6,934
Kentucky	6,043	2,288	453	8,533	272	1,208	934
Mississippi	33,297	34,358	56,360	99,710	31,507	43,246	64,183
Tennessee	2,184	7,225	16,252	17,253	0	0	0
West South Central	**455,170**	**656,727**	**1,009,857**	**1,735,541**	**2,042,085**	**2,214,496**	**2,166,468**
Arkansas	46,297	46,779	67,510	107,445	31,818	6,993	30,254
Louisiana	70,813	119,818	175,573	331,750	356,130	369,183	401,399
Oklahoma	64,780	82,820	127,231	234,721	300,848	347,634	334,446
Texas	273,280	407,310	639,543	1,061,625	1,353,290	1,490,686	1,400,368
Mountain	**95,260**	**134,990**	**136,442**	**198,745**	**164,636**	**178,082**	**196,387**
Arizona	26,681	53,246	36,740	58,898	17,693	54,379	51,258
Colorado	35,550	37,015	35,539	51,194	52,930	29,440	35,409
Idaho	0	0	0	0	18	38	491
Montana	633	341	1,992	2,529	1,059	909	2,320
Nevada	0	6,339	13,271	25,336	25,152	21,749	34,828
New Mexico	21,663	33,701	43,996	54,894	64,239	63,279	60,410
Utah	9,757	3,677	4,742	3,520	2,725	7,575	6,186
Wyoming	975	671	163	2,373	819	713	486
Pacific	**183,664**	**323,693**	**494,963**	**645,478**	**294,105**	**326,654**	**477,376**
Alaska	0	0	2,149	8,198	19,619	24,431	28,295
California	183,664	322,992	492,701	636,270	274,483	302,167	444,601
Hawaii	0	0	0	0	0	0	0
Oregon	0	701	113	1,010	3	0	2,380
Washington	0	0	0	0	0	56	2,100

* Includes direct sales by producers to electric utilities as well as sales by the gas utility industry.
R—Revised.
Source: Energy Information Administration, Energy Data Report—*Power Production, Consumption and Capacity—Annual.*

TABLE 72
GAS UTILITY INDUSTRY GAS USED FOR ELECTRIC GENERATION, 1955-1979[a]

(Trillions of Btu)

Year	Sales				Transfers[c]	Total Sales and Transfers
	Industrial[b]		Other	Total Sales		
	Firm	Interruptible				
1955	739.3		132.4	871.7	191.2	1,062.8
1956	816.9		142.0	958.9	187.6	1,146.4
1957	854.0		134.4	988.4	200.3	1,188.7
1958	872.4		124.3	996.7	236.4	1,233.1
1959	937.3		161.4	1,098.7	222.7	1,321.4
1960	999.3		187.1	1,186.4	234.1	1,420.4
1961	990.6		218.6	1,209.2	244.0	1,453.2
1962	1,040.7		259.0	1,299.7	239.1	1,538.8
1963	1,103.2		306.6	1,409.7	247.1	1,656.8
1964	1,258.3		347.0	1,605.3	265.4	1,870.7
1965	1,179.5		308.5	1,488.0	246.2	1,734.2
1966	1,276.2		367.8	1,644.0	260.2	1,904.2
1967	1,386.9		316.7	1,703.6	254.3	1,957.9
1968	1,489.6		381.3	1,870.9	270.9	2,141.8
1969	1,643.9		360.8	2,004.7	232.6	2,237.3
1970	1,877.5		427.5	2,305.0	283.6	2,588.6
1971	853.6	1,083.6	483.4	2,420.6	595.2	3,015.9
1972	956.5	858.4	553.3	2,368.4	549.5	2,917.9
1973	542.8	8[illegible].6	511.4	1,925.8	477.2	2,403.0
1974	497.2	812.5	387.9	1,697.6	419.8	2,117.4
1975	374.5	623.4	385.8	1,383.6	301.6	1,685.2
1976	478.1	804.5	d	1,282.6	250.9	1,533.5
1977	489.1	873.9	d	1,363.0	241.1	1,604.1
1978	544.2	763.7	d	1,307.9	187.9	1,495.8
1979	665.2	893.6	d	1,558.8	335.0	1,893.7

a. Excludes direct sales by producers to electric utilities.
b. No breakdown available prior to 1971.
c. Represents transfers by the gas department to the electric department of combination gas and electric companies.
d. Other now included with Industrial to conform to the definition of industrial services.

TABLE 73
GAS UTILITY INDUSTRY GAS USED FOR ELECTRIC GENERATION BY STATE, 1979[a]

(Trillions of Btu)

Division and State	Industrial Sales Firm	Industrial Sales Interruptible	Industrial Sales Total	Transfers[b]	Total Sales and Transfers
United States	**665.2**	**893.6**	**1,558.8**	**335.0**	**1,893.7**
New England	**0.0**	**9.3**	**9.3**	**0.0**	**9.3**
Connecticut	0.0	0.0	0.0	0.0	0.0
Maine	0.0	0.0	0.0	0.0	0.0
Massachusetts	0.0	7.5	7.5	0.0	7.5
New Hampshire	0.0	0.0	0.0	0.0	0.0
Rhode Island	0.0	1.8	1.8	0.0	1.8
Vermont	0.0	0.0	0.0	0.0	0.0
Middle Atlantic	**1.3**	**11.8**	**13.1**	**94.8**	**107.9**
New Jersey	0.0	9.0	9.0	22.3	31.4
New York	0.1	2.8	2.8	71.9	74.7
Pennsylvania	1.2	0.0	1.2	0.5	1.8
East North Central	**42.9**	**34.6**	**77.5**	**4.6**	**82.1**
Illinois	23.0	4.4	27.4	0.7	28.1
Indiana	0.2	0.0	0.2	2.5	2.7
Michigan	19.7	8.8	28.5	0.0	28.5
Ohio	0.0	3.3	3.3	0.1	3.4
Wisconsin	0.0	18.1	18.1	1.2	19.4
West North Central	**c**	**80.2**	**80.2**	**29.2**	**109.4**
Iowa	0.0	2.6	2.6	2.7	5.3
Kansas	0.0	47.2	47.2	19.8	67.1
Minnesota	c	1.0	1.0	0.3	1.3
Missouri	0.0	18.2	18.2	6.3	24.5
Nebraska	0.0	11.1	11.1	c	11.1
North Dakota	0.0	0.0	0.0	0.0	0.0
South Dakota	0.0	0.1	0.1	c	0.1
South Atlantic	**0.9**	**29.6**	**30.4**	**16.2**	**46.6**
Delaware	0.0	0.0	0.0	0.0	0.0
District of Columbia	0.0	0.0	0.0	0.0	0.0
Florida	0.9	25.7	26.5	0.0	26.5
Georgia	0.0	3.4	3.4	0.0	3.4
Maryland	0.0	0.0	0.0	10.1	10.1
North Carolina	0.0	0.3	0.3	0.0	0.3
South Carolina	0.0	0.2	0.2	4.3	4.5
Virginia	0.0	0.0	0.0	1.8	1.8
West Virginia	0.0	0.0	0.0	0.0	0.0
East South Central	**30.6**	**7.3**	**37.9**	**1.0**	**38.9**
Alabama	0.0	0.0	0.0	0.0	0.0
Kentucky	0.0	0.0	0.0	0.6	0.6
Mississippi	30.6	7.3	37.9	0.2	38.1
Tennessee	0.0	0.0	0.0	0.2	0.2
West South Central	**510.5**	**208.7**	**719.2**	**132.6**	**851.8**
Arkansas	2.4	0.0	2.4	0.0	2.4
Louisiana	75.3	0.0	75.3	101.3	176.6
Oklahoma	150.8	13.1	163.9	0.0	163.9
Texas	282.0	195.6	477.6	31.3	508.9
Mountain	**65.8**	**72.1**	**137.9**	**56.6**	**194.5**
Arizona	13.0	0.2	13.3	20.1	33.4
Colorado	2.2	31.0	33.2	15.8	49.0
Idaho	0.0	0.0	0.0	0.0	0.0
Montana	0.0	0.0	0.0	2.1	2.1
Nevada	41.7	0.0	41.7	18.0	59.7
New Mexico	8.8	34.9	43.7	0.5	44.3
Utah	0.0	6.0	6.0	0.0	6.0
Wyoming	0.0	0.0	0.0	c	c
Pacific	**13.2**	**440.0**	**453.3**	**0.0**	**453.3**
Alaska	11.2	0.0	11.2	0.0	11.2
California	0.0	440.0	440.0	0.0	440.0
Hawaii	0.0	0.0	0.0	0.0	0.0
Oregon	0.0	0.0	0.0	0.0	0.0
Washington	2.0	0.0	2.0	0.0	2.0

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a. Excludes direct sales by producers to electric utilities.

b. Volumes transferred by the gas department to the electric department of combination gas and electric companies.

c. Less than 0.05 trillion Btu.

TABLE 74

GAS UTILITY INDUSTRY LARGE VOLUME SALES, BY TYPE OF INDUSTRY AND BY DIVISION, 1979

(Trillions of Btu)

Industry Classification	Total U.S.	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Agriculture, forestry and fisheries	33.0	0.1	0.3	6.8	3.0	1.1	0.2	4.0	2.0	15.5
Petroleum and natural gas production	34.6	0.0	a	a	5.2	a	1.1	7.1	5.9	15.2
Other mining	45.1	a	0.0	5.1	0.5	0.0	0.2	9.3	21.4	8.6
Electric services[b]	1,890.1	9.3	107.9	82.1	105.6	46.6	38.9	851.8	194.5	453.3
Other transportation, communication, and public utilities	104.0	3.2	1.5	24.6	40.4	1.1	0.5	13.1	4.6	15.0
Hotels, rooming houses, and camps	26.5	0.1	3.4	9.6	0.5	0.8	0.0	1.5	0.4	10.0
Laundries, cleaning and dyeing	23.4	a	0.5	9.8	a	0.3	0.1	0.2	0.0	12.5
Other services	314.5	2.7	14.5	158.0	15.8	11.9	5.3	13.3	10.3	82.7
Other non-manufacturing	171.5	0.5	14.2	79.6	3.4	1.7	2.7	1.4	8.5	59.6
Food and kindred products	312.9	2.1	21.6	116.2	43.3	14.4	6.8	8.6	16.9	83.0
Textile products, apparel, fabrics, etc.	52.4	1.6	4.5	3.5	0.7	29.9	6.0	0.3	a	5.9
Furniture, lumber, and other wood products	45.3	a	1.3	6.4	1.0	1.8	7.6	8.1	1.3	17.8
Paper and allied products	244.3	0.9	13.3	67.7	2.7	31.4	45.4	17.7	13.8	51.4
Carbon black	31.0	0.1	0.0	1.3	20.4	1.9	0.0	6.2	0.0	1.1
Chemicals and allied products (except carbon black)	605.8	1.2	27.2	136.1	78.6	107.2	47.6	124.7	35.4	47.9
Petroleum refining	300.8	0.1	9.7	20.6	14.3	6.8	10.9	137.7	17.1	83.6
Rubber and miscellaneous plastic products	52.5	0.3	5.4	22.3	4.0	0.8	6.6	3.6	1.4	8.2
Glass products	172.5	1.7	47.3	58.0	10.4	15.6	6.0	9.6	0.9	23.0
Cement	58.8	0.1	a	2.8	14.4	6.2	4.5	6.7	6.8	17.2
Clay products, pottery, etc.	93.6	0.0	10.7	18.3	12.6	28.1	8.7	1.7	4.7	8.8
Other stone products and miscellaneous	95.6	1.0	10.4	22.8	8.0	16.0	3.6	1.3	2.8	29.7
Primary iron and steel industries	614.4	2.8	133.6	322.8	35.8	30.9	33.9	2.1	24.0	28.4
Primary non-ferrous industries	211.7	0.1	16.9	79.5	7.5	8.8	17.3	8.7	45.1	27.3
Fabricated metal products, machinery equipment and supplies	241.5	3.2	31.0	146.1	11.8	6.7	12.2	1.1	2.2	27.1
Transportation equipment	96.7	0.9	8.7	59.8	5.0	4.2	2.7	1.1	0.3	14.0
Other manufacturing	106.6	1.9	11.3	39.5	15.9	5.3	4.5	5.4	2.9	19.8
Public administration	72.2	1.1	6.9	17.9	1.9	11.2	2.7	2.8	6.7	21.0
Total (Sum)[b]	**6,051.3**	**36.0**	**502.0**	**1,517.2**	**462.6**	**390.7**	**275.8**	**1,249.3**	**430.1**	**1,187.7**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**7,690.0**	**81.5**	**716.5**	**1,905.3**	**640.2**	**636.8**	**341.2**	**1,525.1**	**564.8**	**1,278.7**
Total Gas Utility Industry Commercial, Industrial and "Other" sales	**10,337.3**	**148.3**	**817.9**	**2,259.5**	**932.9**	**887.5**	**586.1**	**2,752.6**	**629.6**	**1,322.8**

a. Less than 0.05 trillions of Btu.

b. Includes the following quantities of gas for electric generation not included in Total Commerical, Industrial and "Other" sales of companies reporting this table or in Total Gas Utility Industry sales. Such quantities represent transfers by the gas department to the electric department of combination gas and electric companies:

	Total U.S.	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
	334.9	0.0	94.8	4.5	29.2	16.2	1.0	132.6	56.6	0.0

TABLE 75

GAS UTILITY INDUSTRY LARGE VOLUME SALES BY TYPE OF INDUSTRY, 1955-1979

(Trillions of Btu)

Industry Classification	1955	1960	1965	1970	1975	1978	1979
Agriculture, forestry and fisheries	8.5	10.8	12.0	33.0	49.7	28.5	33.0
Petroleum and natural gas production	41.9	48.3	97.8	101.0	83.8	42.9	34.6
Other mining	14.2	44.8	69.8	59.8	49.3	41.5	45.1
Electric services	1,062.8	1,420.4	1,734.2	2,588.6	1,685.2	1,495.8	1,890.1
Other transportation, communications and public utilities	11.2	22.4	38.5	96.2	95.9	76.5	104.0
Hotels, rooming houses, camps	10.1	16.2	33.5	67.3	77.8	21.5	26.5
Laundries, cleaning and dyeing	2.6	4.0	16.3	21.5	24.3	18.1	23.4
Other services	34.3	34.2	70.1	175.1	236.7	269.8	314.5
Other non-manufacturing	41.8	43.1	74.9	198.6	187.5	139.2	171.5
Ordnance	13.4	14.1	21.2	35.4	b	b	b
Food and kindred products	119.6	167.8	243.0	330.5	338.9	267.3	312.9
Textile products, apparel, fabrics, etc.	16.0	22.6	43.7	72.5	54.6	36.7	52.4
Furniture, lumber and other wood products	10.8	23.1	52.3	64.9	61.1	42.0	45.3
Paper and allied products	121.5	193.2	267.5	402.7	267.6	193.7	244.3
Carbon black	2.8	15.0	42.0	52.8	38.2	32.8	31.0
Chemicals and allied products (except carbon black)	257.3	519.6	644.6	880.7	886.5	588.7	605.8
Petroleum refining	286.2	384.1	375.1	639.6	514.5	236.4	300.8
Rubber and miscellaneous plastic products	42.3	16.8	38.9	47.8	45.1	40.3	52.5
Glass products	90.2	138.4	184.8	208.8	173.7	170.9	172.5
Cement	129.1	169.6	183.5	195.0	158.1	57.2	58.8
Clay products, pottery, etc.	83.6	129.6	153.7	145.3	110.0	83.3	93.6
Other stone products and miscellaneous	30.6	30.8	68.3	82.3	97.0	90.3	95.6
Primary iron and steel industries	204.8	346.1	552.4	669.0	555.5	561.3	614.4
Primary non-ferrous industries	197.3	208.1	270.8	232.9	275.9	202.4	211.7
Fabricated metal products, machinery equipment and supplies	69.3	110.7	181.6	289.8	276.8	248.1	241.5
Transportation equipment	46.9	65.1	112.0	170.8	140.2	98.9	96.7
Other manufacturing	32.0	33.9	63.3	100.0	122.1	113.4	106.6
Public Administration	c	c	c	c	72.1	56.0	72.2
Total (Sum)[a]	**2,981.1**	**4,232.8**	**5,645.9**	**7,961.9**	**6,678.3**	**5,253.6**	**6,051.3**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**3,199.0**	**4,512.7**	**6,050.0**	**8,022.9**	**8,786.0**	**7,377.0**	**7,690.0**
Total Gas Utility Industry Commercial, Industrial and "Other" sales[d]	**3,817.0**	**5,179.8**	**6,636.5**	**9,113.2**	**9,871.9**	**9,647.8**	**10,377.3**

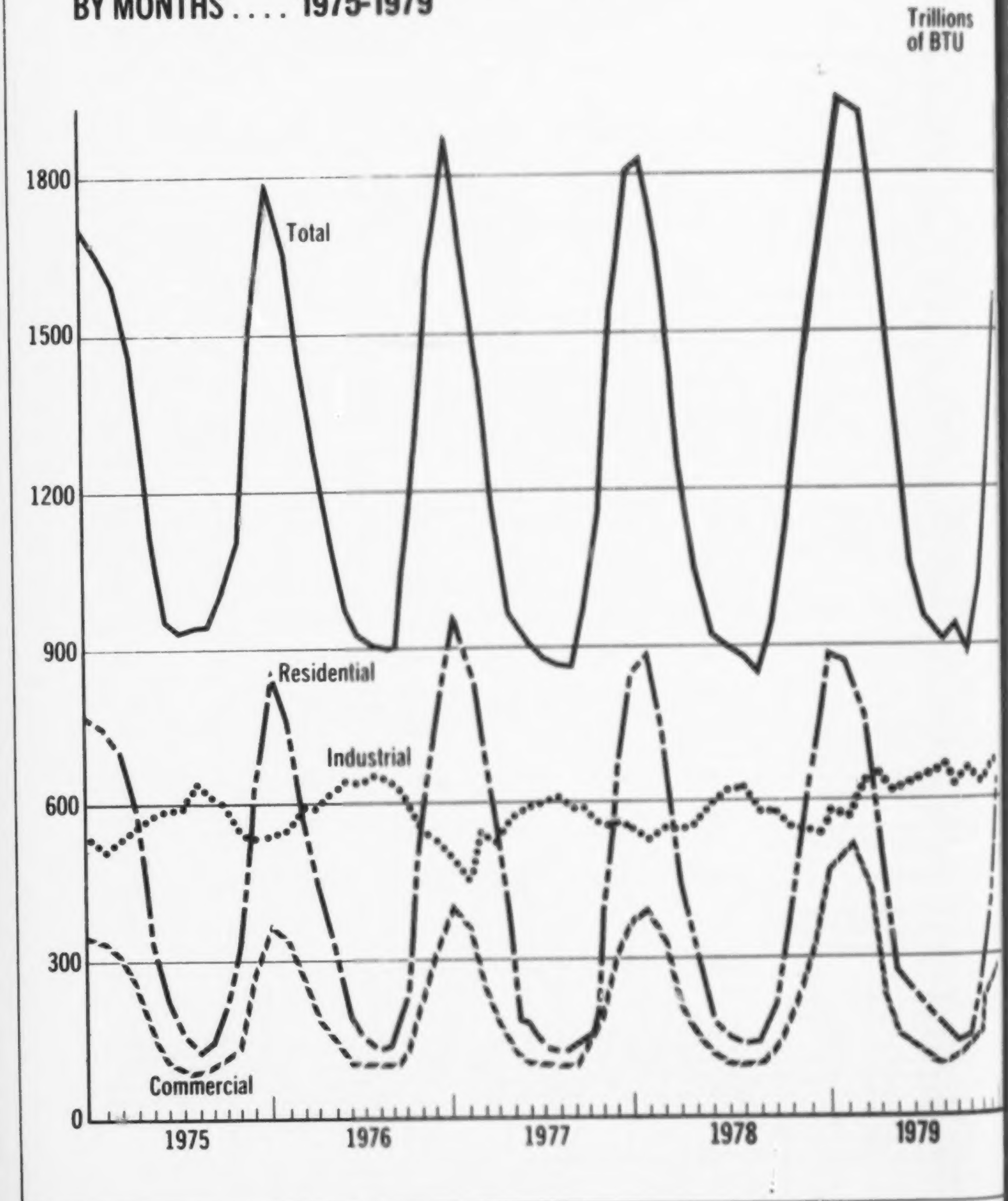
a. Includes the following quantities of gas for electric generation not included in Total Commercial, Industrial, and "Other" sales of companies reporting this table or in Total Gas Utility Industry sales. Such quantities represent transfers by the gas department to the electric department of combination gas and electric companies. Quantities in trillions of Btu's are: 1955-191.2; 1960-234.1; 1965-245.2; 1970-283.6; 1975-301.6; 1978-187.9; and 1979-334.9.

b. Classification eliminated.

c. New classification in 1972.

d. Includes Industrial and "Other" sales only prior to 1971.

UTILITY SALES OF NATURAL GAS TO CONSUMERS BY MONTHS 1975-1979



REFERENCE TABLE 78

TABLE 76
GAS UTILITY INDUSTRY SALES, BY MONTH, 1955-1979

(Trillions of Btu)

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1955-Total	693.5	730.0	676.4	590.1	487.3	447.1	417.6	427.2	432.8	467.1	566.3	715.1	6,650.5
1960-Total	1,031.3	1,015.3	1,078.4	860.1	693.6	617.5	557.4	561.6	557.0	607.4	753.5	948.9	9,282.0
1965-Total	1,304.0	1,329.2	1,313.4	1,168.2	874.9	775.0	748.0	732.8	731.3	823.5	979.4	1,197.9	11,977.6
1966-Total	1,355.8	1,468.4	1,368.4	1,171.5	1,011.7	865.7	796.8	783.8	799.1	890.3	1,066.8	1,278.6	12,856.9
1967-Total	1,502.8	1,426.1	1,429.8	1,183.9	1,064.2	911.9	829.1	822.3	829.6	923.6	1,151.6	1,411.3	13,486.2
1968-Total	1,671.0	1,589.2	1,556.1	1,241.9	1,100.9	978.8	907.0	878.4	880.7	955.6	1,185.4	1,525.4	14,470.4
1969-Total	1,784.4	1,640.0	1,636.8	1,375.3	1,124.0	1,008.9	988.2	954.5	946.6	1,030.6	1,289.9	1,610.5	15,389.7
1970-Total	1,865.8	1,733.0	1,663.0	1,527.7	1,225.7	1,054.3	1,013.5	1,020.2	1,007.5	1,081.1	1,283.7	1,566.4	16,041.9
1971-Total	1,886.8	1,873.5	1,769.5	1,559.1	1,312.2	1,145.2	1,053.3	1,037.4	1,023.7	1,100.9	1,305.7	1,618.4	16,685.7
1972-Total	1,833.1	1,908.1	1,758.3	1,542.6	1,292.5	1,176.1	1,056.1	1,125.9	1,094.5	1,120.0	1,378.7	1,796.2	17,082.1
1973-Total	1,909.4	1,752.8	1,645.3	1,500.1	1,332.1	1,143.8	1,104.8	1,069.0	1,063.1	1,136.5	1,306.7	1,516.3	16,479.9
1974-Total	1,847.6	1,707.2	1,630.7	1,493.6	1,251.6	1,119.9	1,050.8	1,034.9	992.3	1,115.2	1,219.8	1,536.7	16,000.3
1975-Total	1,709.5	1,633.6	1,588.4	1,455.3	1,120.8	944.8	924.7	934.8	935.4	1,009.2	1,102.8	1,503.6	14,862.9
1976-Total	1,797.5	1,644.6	1,451.0	1,252.2	1,099.8	965.6	913.1	900.8	899.1	996.4	1,278.3	1,614.7	14,813.5
1977-Total	1,901.9	1,682.7	1,425.7	1,168.4	974.8	904.5	875.8	866.5	860.7	976.7	1,153.5	1,549.8	14,340.9
1978-Total	1,808.7	1,834.1	1,647.5	1,237.7	1,061.4	921.4	895.1	878.8	839.6	947.7	1,151.1	1,525.5	14,748.4
1979-Total	1,925.1	1,923.8	1,630.5	1,356.3	1,074.6	934.9	903.7	920.9	891.3	1,038.9	1,253.4	1,587.0	15,440.4

TABLE 77
GAS UTILITY INDUSTRY SALES, BY QUARTER AND CLASS OF SERVICE
1955-1979

(Trillions of Btu)

Year and Quarter	Total	Residential	Commercial	Industrial*	Other*
1955					
First	2,100.0	967.4	248.1	815.0	69.3
Second	1,524.5	448.4	119.2	887.8	69.1
Third	1,277.7	203.2	66.9	936.1	71.5
Fourth	1,748.6	614.2	166.4	895.9	72.1
1960					
First	3,124.9	1,459.0	404.6	1,119.7	141.6
Second	2,171.3	679.8	188.0	1,197.1	106.4
Third	1,676.1	265.5	92.7	1,222.1	95.8
Fourth	2,309.7	780.0	232.8	1,170.3	126.6
1965					
First	3,946.6	1,811.2	575.2	1,424.3	135.9
Second	2,818.1	878.9	291.2	1,538.8	109.2
Third	2,212.1	346.1	144.9	1,603.3	117.8
Fourth	3,001.0	961.1	332.8	1,580.0	127.1
1970					
First	5,262.3	2,286.9	867.7	1,939.2	168.6
Second	3,808.1	1,024.3	423.8	2,201.4	158.4
Third	3,041.5	420.7	218.6	2,236.1	166.0
Fourth	3,931.6	1,191.8	496.5	2,062.5	181.0
1972					
First	5,498.1	2,228.0	916.1	2,121.5	232.2
Second	4,012.7	1,059.7	477.6	2,271.8	203.3
Third	3,276.4	460.7	259.9	2,324.0	231.6
Fourth	4,294.9	1,393.4	622.1	2,058.4	220.9
1973					
First	5,354.8	2,264.0	950.7	1,910.2	229.9
Second	3,985.6	1,091.9	500.0	2,197.4	196.3
Third	3,215.0	465.3	280.4	2,237.5	231.8
Fourth	3,924.5	1,172.4	549.8	2,025.7	176.6
1974					
First	5,185.5	2,105.9	908.5	1,985.9	185.1
Second	3,865.1	1,055.0	496.4	2,163.3	150.5
Third	3,078.0	472.6	295.1	2,136.5	173.9
Fourth	3,871.6	1,231.2	593.4	1,867.5	179.5
1975					
First	4,931.5	2,192.8	970.4	1,598.7	169.6
Second	3,520.9	1,137.7	536.3	1,715.9	131.0
Third	2,794.9	474.9	301.2	1,842.2	176.6
Fourth	3,615.6	1,185.6	579.0	1,680.2	170.8
1976					
First	4,893.1	2,165.1	957.6	1,692.4	78.0
Second	3,317.7	963.9	472.4	1,826.4	55.0
Third	2,709.1	446.7	309.2	1,896.0	57.2
Fourth	3,893.5	1,438.5	683.4	1,692.3	79.4
1977					
First	5,010.3	2,395.4	1,019.4	1,506.9	88.7
Second	3,047.7	855.5	448.8	1,682.7	60.7
Third	2,602.9	425.6	314.7	1,804.0	58.6
Fourth	3,680.0	1,269.8	626.5	1,717.1	66.6
1978					
First	5,290.3	2,460.1	1,098.9	1,626.8	104.4
Second	3,220.5	960.2	491.4	1,705.8	63.2
Third	2,613.5	426.6	294.7	1,834.5	57.7
Fourth	3,624.1	1,259.9	614.5	1,674.1	75.7
1979					
First	5,479.5	2,462.8	1,095.8	1,793.4	127.5
Second	3,366.0	965.7	486.3	1,854.5	59.5
Third	2,715.4	431.2	283.8	1,953.8	46.6
Fourth	3,879.4	1,223.4	619.9	1,953.3	82.8

*Prior to 1976, "Other" electric generation (see Table 72) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

TABLE 78

HEATING DEGREE DAYS[a] BY CALENDAR YEAR AND HEATING SEASONS, 1978-1979, AND THIRTY-YEAR NORMALS

	Calendar Year Degree Days			Heating Season Degree Days[b]		
Division and State	30-Year[c] Normals 1946-1975	1978	1979	30-Year[c] Normals 1946/47-1975/76	1978-1979	1979-1980
United States	**4,761**	**5,277**	**5,064**	**3,851**	**4,196**	**3,829**
New England	**6,461**	**7,008**	**6,292**	**4,987**	**5,669**	**5,005**
Connecticut	6,091	6,524	5,816	4,778	4,781	4,556
Maine	8,008	8,565	7,723	5,922	6,013	5,782
Massachusetts	6,241	6,831	6,148	4,840	4,951	4,757
New Hampshire	7,544	8,074	7,294	5,707	5,792	5,469
Rhode Island	5,097	6,434	5,734	4,562	4,653	4,393
Vermont	7,856	8,548	7,689	5,962	6,097	5,720
Middle Atlantic	**5,743**	**6,359**	**5,894**	**4,586**	**4,751**	**4,576**
New Jersey	5,444	6,051	5,529	4,364	4,474	4,342
New York	5,863	6,444	5,951	4,659	4,806	4,618
Pennsylvania	5,758	6,415	6,029	4,607	4,834	4,654
East North Central	**6,245**	**7,086**	**6,909**	**5,036**	**5,608**	**5,198**
Illinois	6,059	6,950	6,901	4,992	5,822	5,199
Indiana	5,375	6,661	6,452	4,709	5,251	4,939
Michigan	6,718	7,440	7,219	5,287	6,331	5,373
Ohio	5,769	6,676	6,316	4,658	5,048	4,865
Wisconsin	7,556	8,190	8,272	5,940	6,658	5,950
West North Central	**6,604**	**7,354**	**7,468**	**5,395**	**6,250**	**4,476**
Iowa	6,864	7,703	7,668	5,626	6,564	5,584
Kansas	4,932	5,043	5,678	4,238	5,024	4,425
Minnesota	8,772	9,185	9,477	6,875	7,698	6,724
Missouri	5,020	5,898	5,896	4,290	5,046	4,548
Nebraska	6,388	7,346	7,127	5,238	6,213	5,304
North Dakota	9,534	10,054	10,441	7,346	8,513	7,171
South Dakota	7,731	8,626	8,482	6,120	7,167	5,960
South Atlantic	**3,074**	**4,179**	**3,124**	**2,655**	**2,760**	**2,746**
Delaware	4,743	5,254	4,803	3,955	4,046	3,906
District of Columbia	d	d	d	d	d	d
Florida	683	895	803	672	719	725
Georgia	2,674	3,044	2,905	2,408	2,491	2,526
Maryland	4,742[e]	5,225[e]	4,872[e]	3,965[e]	4,109[e]	3,938[e]
North Carolina	3,378	3,318	3,554	2,950	3,038	3,100
South Carolina	2,672	3,040	2,832	2,423	2,472	2,578
Virginia	4,262	4,787	4,498	3,591	3,744	3,688
West Virginia	5,093	5,763	5,482	4,157	4,381	4,346
East South Central	**3,411**	**4,049**	**3,889**	**2,996**	**3,239**	**3,247**
Alabama	2,701	3,212	3,085	2,441	2,591	2,661
Kentucky	4,404	5,177	4,903	3,750	4,040	3,994
Mississippi	2,410	2,941	2,891	2,219	2,436	2,493
Tennessee	3,807	4,490	4,333	3,307	3,608	3,580
West South Central	**2,267**	**2,824**	**2,758**	**2,104**	**2,477**	**2,277**
Arkansas	3,216	3,863	3,818	2,903	3,349	3,169
Louisiana	1,700	2,214	2,152	1,608	1,833	1,837
Oklahoma	3,516	4,217	4,170	3,175	3,817	3,330
Texas	2,012	2,525	2,450	1,887	2,231	2,025
Mountain	**5,673**	**5,788**	**5,970**	**4,301**	**4,817**	**4,317**
Arizona	2,328	2,263	2,471	2,065	2,325	1,921
Colorado	7,066	7,497	7,691	5,179	5,846	5,498
Idaho	6,950	6,917	7,124	5,102	5,756	4,994
Montana	8,322	8,837	8,492	5,904	6,901	5,832
Nevada	4,398	4,299	4,348	3,477	3,790	3,296
New Mexico	4,778	4,574	4,947	3,864	4,004	3,769
Utah	6,628	6,471	6,888	5,026	5,595	4,963
Wyoming	7,917	8,405	8,263	5,701	6,596	5,894
Pacific	**3,364**	**3,165**	**3,205**	**2,465**	**2,746**	**2,227**
Alaska	f	f	f	f	f	f
California	2,748	2,515	2,590	2,094	2,329	1,785
Hawaii	f	f	f	f	f	f
Oregon	5,284	5,219	5,098	3,600	4,035	3,569
Washington	5,814	5,702	5,636	3,954	4,391	3,983

a. See glossary for definitions of (heating) degree days. Division heating degree days are the weighted average of all states in a region, according to the 1970 population. National heating degree days are the weighted average of all divisions, according to the 1970 population.

b. Heating season is defined as November through March period.

c. The transference of many weather stations between city locations and nearby airports at some time during the 30 year period had led to the introduction of slight inconsistencies in the average data.

d. Included in Maryland.

e. Includes the District of Columbia.

f. Not available.

Source: National Oceanic and Atmospheric Administration.

TABLE 79
SALES OF PRODUCERS OF NATURAL GAS TO INTERSTATE TRANSMISSION COMPANIES, BY STATE, 1960-1975[a]

Division and State	1960	1965	1970	1974	1975	
	(Millions of cubic feet)	(Millions of cubic feet)	(Millions of cubic feet)	(Millions of cubic feet)	(Millions of cubic feet)	Percent of total
Grand Total	**8,106,413**	**10,315,400**	**14,440,737**	**13,524,575**	**12,467,987**	**100.0**
Total United States	**7,967,502**	**9,892,833**	**13,671,952**	**12,615,924**	**11,566,075**	**92.8**
New England	**0**	**0**	**0**	**0**	**0**	**0.0**
Middle Atlantic	**48,137**	**23,172**	**21,007**	**21,695**	**21,429**	**0.2**
New Jersey	0	0	0	0	0	0.0
New York	3,508	2,195	1,163	1,932	1,693	b
Pennsylvania	44,629	20,977	19,844	19,763	19,736	0.2
East North Central	**17,753**	**15,902**	**27,482**	**24,445**	**22,150**	**0.2**
Illinois	546	0	0	0	0	0.0
Indiana	0	88	42	0	56	b
Michigan	23	0	77	0	0	0.0
Ohio	17,184	15,814	27,363	24,445	22,094	0.2
Wisconsin	0	0	0	0	0	0.0
West North Central	**493,083**	**625,158**	**682,872**	**718,302**	**669,911**	**5.4**
Iowa	0	0	0	0	0	0.0
Kansas	474,882	600,479	662,317	703,500	655,494	5.3
Minnesota	0	0	0	0	0	0.0
Missouri	0	0	0	0	0	0.0
Nebraska	8,711	5,404	3,522	3,269	2,666	b
North Dakota	9,490	19,275	17,033	11,533	11,751	0.1
South Dakota	0	0	0	0	0	0.0
South Atlantic	**83,295**	**101,753**	**135,810**	**100,042**	**90,726**	**0.7**
Delaware	0	0	0	0	0	0.0
District of Columbia	0	0	0	0	0	0.0
Florida	0	0	2	24,026	18,074	0.1
Georgia	0	0	0	0	0	0.0
Maryland	3,998	109	122	56	7	b
North Carolina	0	0	0	0	0	0.0
South Carolina	0	0	0	0	0	0.0
Virginia	2,293	1,938	1,726	1,285	1,259	b
West Virginia	77,004	99,706	133,960	74,675	71,386	0.6
East South Central	**176,043**	**172,221**	**133,655**	**73,760**	**59,165**	**0.5**
Alabama	14	44	2	7,771	7,215	0.1
Kentucky	21,853	30,965	18,849	16,177	14,603	0.1
Mississippi	154,176	141,212	114,804	49,812	37,347	0.3
Tennessee	0	0	c	0	0	0.0
West South Central	**6,471,407**	**8,114,087**	**11,601,011**	**10,524,987**	**9,572,899**	**76.8**
Arkansas	33,236	51,212	133,340	80,210	74,822	0.6
Louisiana	2,387,261	3,555,147	6,027,448	5,669,947	5,242,480	42.0
Oklahoma	468,336	818,458	1,190,020	1,031,020	915,886	7.3
Texas	3,582,574	3,689,270	4,250,203	3,743,810	3,339,711	26.8
Mountain	**677,784**	**840,540**	**1,070,115**	**1,152,693**	**1,129,796**	**9.1**
Arizona	0	1,430	1,125	19	3	b
Colorado	52,560	42,434	61,630	80,157	97,877	0.8
Idaho	0	0	0	0	0	0.0
Montana	1,704	963	4,200	23,031	17,930	0.1
Nevada	0	0	0	0	0	0.0
New Mexico	445,504	573,058	733,730	789,702	755,106	6.1
Utah	39,446	41,220	30,882	25,106	28,108	0.2
Wyoming	138,570	181,435	238,548	234,678	230,772	1.9
Pacific	**0**	**0**	**0**	**0**	**0**	**0.0**
Canada	**91,935**	**370,577**	**727,442**	**907,929**	**901,912**	**7.2**
Mexico	**46,976**	**51,990**	**41,343**	**222**	**0**	**0.0**

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a. Data refer to volume of natural gas purchased from domestic and foreign producers by interstate natural gas pipelines. These pipeline companies accounted for about 70 percent of all natural gas produced and marketed in the United States.
b. Less than 0.1 percent.
c. Less than 500 Mcf.
Source: Federal Power Commission. *Sales of Producers of Natural Gas to Interstate Pipeline Companies.*

TABLE 80

TOTAL ETHANE AND LIQUIFIED PETROLEUM GAS SALES IN LIQUID FORM TO ULTIMATE CONSUMERS: BY MAJOR USE, 1955-1978[a]

(Thousands of gallons)

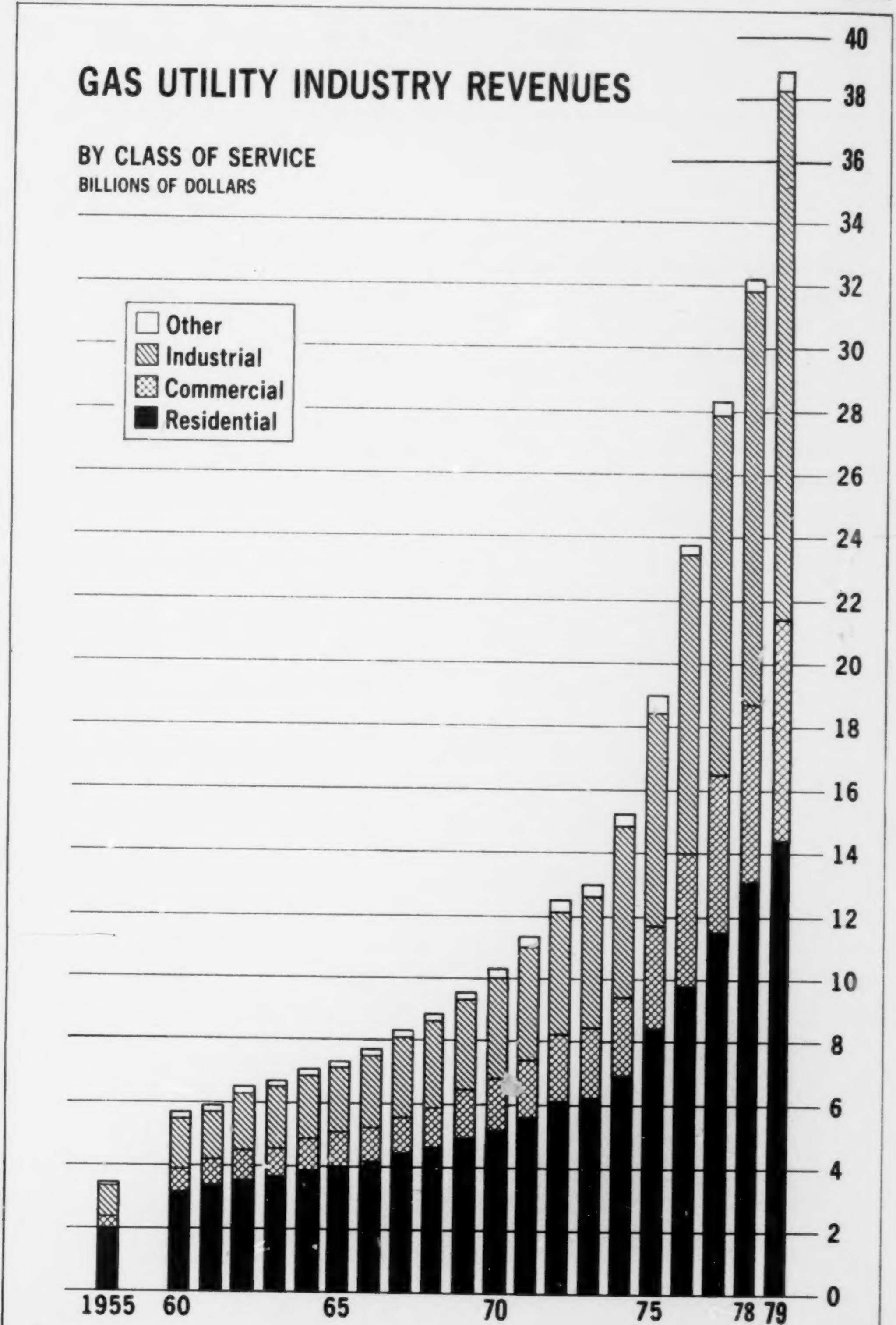
Year	Total	Gas Utility	Residential and Commercial	Industrial	Refinery Fuel	Internal Combustion Engine Fuel	Chemical Manufacturing	Synthetic Rubber	Other[b]
1955	6,122,718	213,760	2,801,379	423,431	101,033	651,821	1,493,177	406,210	31,907
1956	6,635,763	212,293	3,001,021	438,916	142,500	773,471	1,600,604	418,101	48,767
1957	6,939,121	231,155	3,067,070	441,474	122,405	805,056	1,732,338	418,189	121,434
1958	7,462,089	238,911	3,293,677	492,862	179,231	852,387	1,898,862	371,961	134,198
1959	8,919,161	182,903	3,934,792	439,200	136,830	889,698	2,525,910	513,941	295,887
1960	9,554,649	157,041	4,224,537	438,659	157,036	897,915	3,019,011	538,971	111,479
1961	9,797,883	168,989	4,318,215	402,428	166,572	880,315	3,239,479	519,637	102,248
1962	10,729,394	173,481	4,712,682	424,730	231,084	931,611	3,571,339	587,379	97,088
1963	11,570,278	216,627	5,053,157	493,208	356,958	999,363	3,771,413	599,556	79,996
1964	12,473,258	117,004	5,180,794	521,006	439,110	1,176,260	4,315,725	651,472	71,887
1965	12,908,899	121,895	5,345,972	526,420	153,258	1,193,818	4,802,780	679,884	84,872
1966	13,594,755	109,310	5,681,636	552,911	92,820	1,213,514	5,096,044	734,276	114,244
1967	14,466,144	96,596	6,221,839	635,079	c	1,152,264	5,444,023	756,259	160,084
1968	16,165,632	171,193	6,718,108	807,866	c	1,228,498	6,250,067	775,465	214,435
1969	18,716,376	183,062	7,656,872	948,574	c	1,467,094	7,487,137	757,050	216,587
1970	18,789,162	212,177	7,568,691	897,130	c	1,335,851	7,730,058	790,655	254,600
1971	19,183,542	209,778	7,668,413	908,965	c	1,324,126	8,809,319	d	262,941
1972	21,833,700	302,481	8,253,340	1,124,263	c	1,479,190	10,358,858	d	315,568
1973	22,199,048	344,436	7,845,991	1,094,898	c	1,409,302	10,977,239	d	527,182
1974	21,538,692	356,848	7,231,035	1,069,319	c	1,309,750	10,654,038	d	917,702
1975	20,430,690	402,752	7,019,989	1,081,929	c	1,162,396	9,403,057	d	1,360,567
1976	21,586,740	445,947	7,313,023	1,051,753	c	1,169,766	9,658,488	d	1,947,763
1977	21,823,452	566,115	7,168,585	1,043,455	c	1,144,930	9,893,749	d	2,006,618
1978	21,657,468	496,789	6,954,440	1,339,928	c	993,277	10,197,845	d	1,675,189

a. Excludes LPG sales for export or for use in gasoline production. Includes ethane, propane, butane, and butane-propane mixtures.
b. Includes secondary recovery of petroleum, agriculture uses, and use as substitute natural gas feedstock.
c. Included in "Industrial."
d. Included in "Chemical Manufacturing."
Source: Energy Information Administration, U.S. Department of Energy, *Liquefied Petroleum Gas Sales Annual*.

SECTION IX
REVENUES

	1979	% Change 79/78
Gas Utility Industry ($Thousands)		
Total	38,947,143	+21.1
Residential	14,832,950	+14.6
Commercial	6,623,766	+16.3
Industrial	16,960,870	+29.8
Other	529,557	+17.5
Resale	28,104,263	+35.5
Electric Generation	3,404,547	+46.0

CHART 16



REFERENCE: TABLE 81

REVENUES

TABLE 81
GAS UTILITY INDUSTRY REVENUES, BY CLASS OF SERVICE, 1955-1979[a]

(Thousands)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1955	$ 3,449,699	$ 2,007,450	$ 424,090	$ 937,591	$ 80,568
1956	3,850,071	2,236,500	471,258	1,065,568	76,745
1957	4,133,555	2,378,938	505,678	1,149,931	99,008
1958	4,568,321	2,657,616	571,212	1,228,980	110,513
1959	5,065,228	2,870,473	632,665	1,431,237	130,853
1960	5,617,387	3,177,430	723,448	1,563,285	153,224
1961	5,992,879	3,376,781	789,202	1,658,276	168,620
1962	6,444,860	3,603,266	874,366	1,795,894	171,334
1963	6,726,815	3,727,868	910,497	1,905,733	182,717
1964	7,132,685	3,894,870	998,386	2,048,527	190,902
1965	7,406,978	4,029,562	1,053,647	2,147,958	175,811
1966	7,869,888	4,195,331	1,135,352	2,334,654	204,551
1967	8,260,739	4,382,837	1,223,897	2,460,885	193,120
1968	8,781,152	4,567,307	1,315,409	2,675,261	223,175
1969	9,479,566	4,883,029	1,459,054	2,918,973	218,510
1970	10,282,611	5,207,335	1,620,446	3,181,206	273,624
1971	11,357,392	5,635,395	1,829,309	3,568,582	324,106
1972	12,465,235	6,094,171	2,063,803	3,943,011	364,250
1973	12,987,272	6,246,988	2,172,460	4,196,714	371,110
1974	15,242,481	6,899,395	2,539,300	5,391,139	412,647
1975	19,074,323	8,445,484	3,302,567	6,718,098	608,174
1976	23,701,211	9,941,013	4,075,009	9,373,932	311,257
1977	28,303,200	11,540,805	4,979,890	11,385,220	397,285
1978	32,149,922	12,938,865	5,695,666	13,064,676	450,714
1979	38,947,143	14,832,950	6,623,766	16,960,870	529,557

a. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.
b. Prior to 1976 "Other" electric generation (refer to Table 72) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

TABLE 82
GAS UTILITY INDUSTRY REVENUES, BY STATE AND CLASS OF SERVICE, 1979

(Thousands)

Division and State	Total	Class of Service Residential	Commercial	Industrial*	Other
United States	**$38,947,143**	**$14,832,950**	**$6,623,766**	**$16,960,870**	**$529,557**
New England	**1,154,340**	**625,279**	**286,534**	**229,494**	**11,033**
Connecticut	284,987	149,790	69,008	66,054	135
Maine	8,584	3,035	2,930	2,619	0
Massachusetts	710,637	393,854	188,710	118,995	9,078
New Hampshire	31,293	15,387	7,599	6,559	1,748
Rhode Island	101,989	57,729	17,352	26,908	0
Vermont	16,850	5,484	2,935	8,359	72
Middle Atlantic	**5,205,040**	**2,830,189**	**925,319**	**1,354,848**	**94,684**
New Jersey	1,088,899	597,561	242,173	248,077	1,088
New York	2,101,493	1,321,134	373,039	341,129	66,191
Pennsylvania	2,014,648	911,494	310,107	765,642	27,405
East North Central	**10,095,310**	**4,575,445**	**1,946,167**	**3,548,973**	**24,725**
Illinois	3,248,762	1,535,821	671,972	1,038,694	2,275
Indiana	1,170,015	460,579	175,597	529,163	4,676
Michigan	2,236,049	1,022,702	488,461	724,871	15
Ohio	2,465,672	1,174,385	438,072	835,993	17,222
Wisconsin	974,812	381,958	172,065	420,252	537
West North Central	**3,271,588**	**1,405,050**	**705,709**	**1,144,589**	**16,240**
Iowa	631,844	260,947	138,280	230,425	2,192
Kansas	657,809	175,439	77,801	397,048	7,521
Minnesota	692,898	320,519	135,971	233,384	3,024
Missouri	838,496	448,441	230,032	156,859	3,164
Nebraska	320,989	133,887	76,210	110,740	152
North Dakota	66,576	33,248	28,055	5,153	120
South Dakota	62,976	32,569	19,360	10,980	67
South Atlantic	**3,254,967**	**1,205,756**	**585,992**	**1,359,750**	**103,469**
Delaware	64,856	28,183	11,288	23,955	1,430
District of Columbia	92,274	50,792	35,864	5,618	0
Florida	466,567	68,271	73,475	246,771	78,050
Georgia	754,497	301,080	134,081	312,756	6,580
Maryland	486,070	263,457	75,662	146,790	161
North Carolina	355,430	107,423	65,713	179,171	3,123
South Carolina	291,517	70,147	39,904	172,466	9,000
Virginia	384,873	173,359	89,189	117,352	4,973
West Virginia	358,883	143,044	60,816	154,871	152
East South Central	**1,839,646**	**571,787**	**278,985**	**951,351**	**37,523**
Alabama	579,898	183,556	70,198	325,078	1,066
Kentucky	411,919	188,246	77,290	132,934	13,449
Mississippi	371,211	87,501	40,322	224,722	18,666
Tennessee	476,618	112,484	91,175	268,617	4,342
West South Central	**6,979,469**	**1,197,430**	**599,058**	**4,994,781**	**188,200**
Arkansas	347,120	89,318	51,282	204,337	2,183
Louisiana	1,138,637	198,335	64,338	855,809	20,155
Oklahoma	872,633	174,694	91,669	603,008	3,262
Texas	4,621,079	735,083	391,769	3,331,627	162,600
Mountain	**2,049,483**	**717,381**	**412,289**	**880,144**	**39,669**
Arizona	360,604	114,478	55,078	185,649	5,399
Colorado	577,045	243,219	167,752	163,972	2,102
Idaho	142,799	32,601	32,075	78,123	0
Montana	139,459	55,513	33,362	44,816	5,768
Nevada	191,596	42,436	31,328	116,811	1,021
New Mexico	296,668	81,293	38,207	152,489	24,679
Utah	227,855	109,580	28,010	90,219	46
Wyoming	113,457	38,261	26,477	48,065	654
Pacific	**5,097,300**	**1,704,633**	**881,713**	**2,496,940**	**14,014**
Alaska	36,536	12,908	9,500	9,920	4,208
California	4,243,333	1,467,734	690,285	2,077,868	7,446
Hawaii	32,930	8,280	8,682	15,968	0
Oregon	307,910	87,022	60,796	160,092	0
Washington	476,591	128,689	112,450	233,092	2,360

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* Includes Electric Generation—See Table 87 for breakout.

REVENUES

TABLE 83
GAS UTILITY INDUSTRY REVENUES, BY STATE, 1955–1979[a]

(Thousands)

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	**$3,449,699**	**$5,617,387**	**$7,406,978**	**$10,282,611**	**$19,101,498**	**$32,149,922**	**$38,947,143**
New England	**137,844**	**212,719**	**274,937**	**377,666**	**700,071**	**997,745**	**1,154,340**
Connecticut	34,385	52,198	66,653	98,178	178,480	256,885	284,987
Maine	3,288	3,608	3,845	4,013	5,983	8,166	8,584
Massachusetts	83,648	131,588	171,040	228,224	425,411	605,102	710,637
New Hampshire	3,072	5,126	7,336	10,328	17,190	26,700	31,293
Rhode Island	12,071	18,803	24,599	34,360	65,982	87,364	101,989
Vermont	1,380	1,396	1,464	2,563	7,025	13,528	16,850
Middle Alantic	**702,954**	**1,068,271**	**1,342,428**	**1,753,799**	**2,940,846**	**4,550,552**	**5,205,040**
New Jersey	113,207	192,315	268,622	372,672	594,560	937,784	1,088,899
New York	307,619	462,574	570,984	720,609	1,248,149	1,877,570	2,101,493
Pennsylvania	282,128	413,382	502,822	660,518	1,098,137	1,735,198	2,014,648
East North Central	**836,988**	**1,394,218**	**1,995,933**	**2,888,886**	**5,033,327**	**8,403,362**	**10,095,310**
Illinois	234,844	393,707	555,763	829,369	1,504,405	2,676,179	3,248,762
Indiana	83,758	135,593	218,436	356,270	530,454	864,057	1,170,015
Michigan	165,884	290,178	434,292	651,318	1,269,106	1,950,328	2,236,049
Ohio	304,392	483,987	625,011	789,008	1,254,154	2,122,891	2,465,672
Wisconsin	48,110	90,753	162,431	262,921	475,208	789,907	974,812
West North Central	**360,139**	**540,961**	**701,789**	**982,976**	**1,585,864**	**2,668,821**	**3,271,588**
Iowa	57,598	96,062	127,197	180,607	311,364	515,969	631,844
Kansas	77,092	100,563	125,238	178,128	282,119	544,462	657,809
Minnesota	68,250	113,648	156,680	218,398	352,170	550,431	692,898
Missouri	97,997	144,596	187,021	267,726	406,752	698,896	838,496
Nebraska	46,606	66,334	77,722	101,542	169,010	256,861	320,989
North Dakota	3,516	5,712	10,566	15,540	31,037	51,507	66,576
South Dakota	9,080	14,046	17,365	21,035	33,412	50,695	62,976
South Atlantic	**251,976**	**476,032**	**631,577**	**941,975**	**1,538,752**	**2,554,998**	**3,254,967**
Delaware	4,732	10,102	15,881	22,672	33,229	61,582	64,856
District of Columbia	20,584	26,868	29,602	34,635	54,671	85,910	92,274
Florida	19,972	47,537	73,357	120,609	146,526	295,752	466,567
Georgia	54,175	104,603	127,728	191,637	349,550	589,792	754,497
Maryland	50,017	87,037	113,321	163,999	272,830	446,409	486,070
North Carolina	10,954	30,669	54,773	106,051	165,659	232,479	355,430
South Carolina	7,966	23,344	42,736	74,858	130,662	220,220	291,517
Virginia	39,081	67,569	89,235	126,840	206,109	325,343	384,873
West Virginia	44,495	78,303	84,944	100,674	179,516	297,511	358,883
East South Central	**183,932**	**312,695**	**365,717**	**509,350**	**775,705**	**1,356,676**	**1,839,646**
Alabama	56,338	93,652	113,647	149,962	237,710	443,510	579,898
Kentucky	43,491	80,075	91,310	127,787	199,738	317,486	411,919
Mississippi	34,821	60,254	68,331	100,383	134,730	250,323	371,211
Tennessee	49,282	78,714	92,429	131,218	203,527	345,357	476,618
West South Central	**404,335**	**642,063**	**771,223**	**1,066,433**	**2,953,148**	**6,271,531**	**6,979,469**
Arkansas	40,176	58,303	83,252	125,928	175,862	281,729	347,120
Louisiana	82,473	141,741	165,926	219,303	386,609	895,591	1,138,637
Oklahoma	57,738	88,272	103,263	127,367	328,817	789,929	872,633
Texas	223,948	353,747	418,782	593,835	2,061,860	4,304,282	4,621,079
Mountain	**149,959**	**246,824**	**325,757**	**456,593**	**920,668**	**1,580,032**	**2,049,483**
Arizona	30,301	52,255	65,722	95,423	171,773	295,115	360,604
Colorado	50,380	69,462	88,404	120,563	241,901	418,041	577,045
Idaho	54	11,555	19,776	28,990	75,818	117,228	142,799
Montana	15,736	22,159	32,003	42,871	82,021	120,430	139,459
Nevada	2,762	8,786	17,544	32,383	79,858	107,971	191,596
New Mexico	22,104	38,804	43,638	56,975	125,617	250,269	296,665
Utah	19,651	32,269	43,572	55,273	101,164	184,388	227,855
Wyoming	8,971	11,534	15,098	24,115	42,516	86,590	113,457
Pacific	**421,572**	**723,604**	**997,617**	**1,304,933**	**2,653,117**	**3,766,208**	**5,097,300**
Alaska	b	b	4,575	11,678	24,829	31,802	36,536
California	401,969	653,350	875,876	1,117,573	2,193,048	3,075,505	4,243,333
Hawaii	b	5,003	6,053	7,714	24,125	26,536	32,930
Oregon	11,230	24,806	42,169	65,096	156,703	252,108	307,910
Washington	8,373	40,445	68,944	102,872	254,412	380,257	476,591

a. Excludes revenues from sales for resale.
b. Not available.

TABLE 84
GAS UTILITY INDUSTRY REVENUES FROM GAS FOR RESALE BY STATE, 1955-1979*

(Thousands)

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	$1,657,585	$3,165,820	$4,255,066	$6,217,662	$11,573,752	$20,743,3[illegible]2	$28,104,263
New England	37,000	82,195	110,807	168,196	382,550	569,076	663,309
Connecticut				51,891	125,226	179,527	209,990
Maine				0	0	0	0
Massachusetts				94,590	216,069	331,599	382,076
New Hampshire				5,319	5,744	10,437	12,330
Rhode Island				16,396	34,645	47,513	58,913
Vermont				0	866	0	0
Middle Atlantic	303,647	575,739	777,878	1,057,060	1,761,307	2,972,493	3,929,214
New Jersey				215,211	365,302	587,662	750,462
New York				371,895	532,961	882,520	1,242,544
Pennsylvania				469,951	863,044	1,502,311	1,936,208
East North Central	398,895	699,808	1,151,990	1,940,570	3,596,246	6,471,099	8,482,001
Illinois				529,299	1,041,633	1,830,303	2,659,109
Indiana				188,301	292,665	567,488	826,493
Michigan				278,232	659,019	1,236,843	1,417,563
Ohio				756,382	1,144,706	2,017,336	2,533,141
Wisconsin				188,355	458,223	819,129	1,045,675
West North Central	169,161	251,580	306,416	439,274	803,046	1,465,897	1,869,478
Iowa				105,106	202,852	349,870	439,368
Kansas				52,935	89,538	181,489	213,212
Minnesota				100,758	178,677	312,550	470,159
Missouri				127,783	231,990	465,789	556,522
Nebraska				42,394	77,384	120,133	145,047
North Dakota				2,186	7,695	11,140	14,039
South Dakota				8,114	14,910	24,926	31,131
South Atlantic	247,567	487,720	597,386	748,392	1,094,146	2,033,430	2,664,983
Delaware				680	1,170	1,922	2,180
District of Columbia				0	0	0	0
Florida				24,297	54,786	116,944	151,459
Georgia				122,268	217,592	399,775	574,194
Maryland				81,983	159,003	290,646	358,507
North Carolina				38,167	96,134	126,358	243,700
South Carolina				75,078	86,854	153,824	229,190
Virginia				99,200	177,878	385,520	395,067
West Virginia				306,719	300,729	558,441	710,686
East South Central	179,598	343,356	348,642	495,572	752,002	1,472,591	2,085,623
Alabama				79,205	140,282	270,026	430,126
Kentucky				156,277	169,609	305,889	404,624
Mississippi				92,771	163,268	325,933	466,881
Tennessee				167,320	278,843	570,743	783,992
West South Central	120,055	238,630	236,059	324,987	765,273	1,674,986	2,624,036
Arkansas				6,684	9,328	15,307	21,201
Louisiana				192,241	354,067	741,059	1,083,773
Oklahoma				33,698	91,809	221,432	249,643
Texas				92,363	310,069	697,218	1,269,419
Mountain	169,331	375,843	437,321	622,947	1,349,007	2,333,814	3,339,102
Arizona				482,102	935,305	1,513,074	2,251,654
Colorado				65,331	163,200	395,363	524,703
Idaho				24,852	96,221	136,934	202,514
Montana				3,435	7,289	13,151	36,360
Nevada				2,950	12,147	22,089	27,229
New Mexico				20,924	34,447	71,541	87,779
Utah				4,186	3,113	7,207	13,800
Wyoming				19,168	97,285	174,455	195,063
Pacific	32,331	110,949	288,567	420,664	1,070,175	1,749,996	2,446,517
Alaska				0	0	0	0
California				249,666	294,546	491,742	806,786
Hawaii				0	0	0	0
Oregon				120,229	598,295	983,314	1,267,097
Washington				50,769	177,334	274,940	372,634

*Includes natural gas only prior to 1970 and state breakdowns not available prior to 1970.

REVENUES

TABLE 85
GAS UTILITY INDUSTRY FIRM AND INTERRUPTIBLE GAS REVENUES BY STATE, 1979

(Thousands)

Division and State	Commercial			Industrial*		
	Total	Firm	Interruptible	Total	Firm	Interruptible
United States	**$6,623,766**	**$6,300,105**	**$323,661**	**$16,960,870**	**$10,030,932**	**$6,929,938**
New England	**288,534**	**262,446**	**26,088**	**229,494**	**145,160**	**84,334**
Connecticut	69,008	66,072	2,936	66,054	59,434	6,620
Maine	2,930	2,930	0	2,619	2,386	233
Massachusetts	188,710	165,888	22,822	118,995	58,910	60,085
New Hampshire	7,599	7,599	0	6,559	5,380	1,179
Rhode Island	17,352	17,022	330	26,908	10,691	16,217
Vermont	2,935	2,935	0	8,359	8,359	0
Middle Atlantic	**925,319**	**901,426**	**23,893**	**1,354,848**	**1,092,631**	**262,217**
New Jersey	242,173	222,503	19,670	248,077	150,087	97,990
New York	373,039	369,930	3,109	341,129	262,926	78,203
Pennsylvania	310,107	308,993	1,114	765,642	679,618	86,024
East North Central	**1,946,167**	**1,899,498**	**46,669**	**3,548,973**	**2,914,264**	**634,709**
Illinois	671,972	670,503	1,469	1,038,694	905,063	133,631
Indiana	175,597	166,926	8,671	529,163	469,080	60,083
Michigan	488,461	482,233	6,228	724,871	579,806	145,065
Ohio	438,072	434,690	3,382	835,993	771,475	64,518
Wisconsin	172,065	145,146	26,919	420,252	188,840	231,412
West North Central	**705,709**	**609,360**	**96,349**	**1,144,589**	**490,572**	**654,017**
Iowa	138,280	110,470	27,810	230,425	148,391	82,034
Kansas	77,801	67,116	10,685	397,048	130,630	266,418
Minnesota	135,971	126,033	9,938	233,384	89,514	143,870
Missouri	230,032	195,482	34,550	156,859	51,810	105,049
Nebraska	76,210	70,573	5,637	110,740	69,087	41,653
North Dakota	28,055	22,404	5,651	5,153	0	5,153
South Dakota	19,360	17,282	2,078	10,980	1,140	9,840
South Atlantic	**585,992**	**573,369**	**12,623**	**1,359,750**	**659,405**	**700,345**
Delaware	11,288	10,848	440	23,955	19,682	4,273
District of Columbia	35,864	35,864	0	5,618	0	5,618
Florida	73,475	72,028	1,447	246,771	74,515	172,256
Georgia	134,081	133,481	600	312,756	47,899	264,857
Maryland	75,662	75,662	0	146,790	68,204	78,586
North Carolina	65,713	65,635	78	179,171	140,381	38,790
South Carolina	39,904	33,271	6,633	172,466	76,407	96,059
Virginia	89,189	85,908	3,281	117,352	80,375	36,977
West Virginia	60,816	60,672	144	154,871	151,942	2,929
East South Central	**278,985**	**259,834**	**19,151**	**951,351**	**621,116**	**330,235**
Alabama	70,198	62,072	8,126	325,078	177,567	147,511
Kentucky	77,290	70,670	6,620	132,934	74,411	58,523
Mississippi	40,322	40,315	7	224,722	201,427	23,295
Tennessee	91,175	86,777	4,398	268,617	167,711	100,906
West South Central	**599,058**	**588,043**	**11,015**	**4,994,781**	**3,372,725**	**1,622,056**
Arkansas	51,282	50,727	555	204,337	181,926	22,411
Louisiana	64,338	64,313	25	855,809	562,191	293,618
Oklahoma	91,669	83,308	8,361	603,008	411,140	191,868
Texas	391,769	389,695	2,074	3,331,627	2,217,468	1,114,159
Mountain	**412,289**	**408,654**	**3,635**	**880,144**	**465,038**	**415,106**
Arizona	55,078	55,078	0	185,649	180,099	5,550
Colorado	167,752	167,158	594	163,972	32,643	131,329
Idaho	32,075	30,729	1,346	78,123	66,347	11,776
Montana	33,362	32,915	447	44,816	2,992	41,824
Nevada	31,328	31,328	0	116,811	116,811	0
New Mexico	38,207	37,005	1,202	152,489	29,589	122,900
Utah	28,010	28,010	0	90,219	24,138	66,081
Wyoming	26,477	26,431	46	48,065	12,419	35,646
Pacific	**881,713**	**797,475**	**84,238**	**2,496,940**	**270,021**	**2,226,919**
Alaska	9,500	9,500	0	9,920	9,920	0
California	690,285	633,816	56,469	2,077,868	67,026	2,010,842
Hawaii	8,682	8,682	0	15,968	15,968	0
Oregon	60,796	59,037	1,759	160,092	77,425	82,667
Washington	112,450	86,440	26,010	233,092	99,682	133,410

*Includes Electric Generation.

TABLE 86

GAS UTILITY INDUSTRY REVENUES FROM GAS USED FOR ELECTRIC GENERATION, 1955-1979[a]

(Thousands)

	Revenue					
	Industrial[b]					
Year	Firm	Interruptible	Other	Total Revenue	Credits[c]	Total Revenue and Credits
1955		$126,296	$ 35,157	$ 161,453	$ 39,196	$ 200,649
1956		149,241	33,174	182,415	38,386	220,801
1957		159,909	38,469	198,378	47,608	245,986
1958		178,563	38,393	216,956	61,494	278,450
1959		205,448	52,050	257,498	54,441	311,939
1960		228,474	64,585	293,059	73,887	366,946
1961		247,811	75,437	323,248	74,988	398,236
1962		264,637	86,810	351,447	75,747	427,194
1963		282,932	96,808	379,740	73,517	453,257
1964		304,974	107,193	412,167	77,919	490,086
1965		293,999	94,119	388,118	72,919	461,037
1966		325,605	114,051	439,656	73,073	512,729
1967		346,912	96,643	443,555	75,298	518,853
1968		380,995	117,159	498,154	80,816	578,970
1969		426,325	112,454	538,779	71,747	610,526
1970		520,882	137,553	658,435	92,443	750,878
1971	$ 237,111	$ 335,539	160,035	732,685	201,213	933,898
1972	277,344	294,885	201,865	774,094	193,655	967,749
1973	185,106	309,653	214,419	709,178	197,418	906,596
1974	271,516	395,889	225,124	892,529	269,148	1,161,677
1975	352,660	473,951	361,969	1,188,580	293,936	1,482,516
1976	594,784	1,015,066	d	1,609,850	315,935	1,925,785
1977	779,919	1,465,678	d	2,245,597	379,274	2,624,871
1978	953,406	1,378,534	d	2,331,940	330,572	2,662,512
1979	1,424,871	1,979,676	d	3,404,547	721,948	4,126,495

a. Excludes revenues from direct sales by producers to straight electric utilities.
b. No breakdown available prior to 1971.
c. Represents "Revenues" from transfers of gas for electric generation. Such "Revenues" are credits by the electric department to the gas department of combination gas and electric companies.
d. Other now included with Industrial to conform to the definition of industrial services.

TABLE 87
GAS UTILITY INDUSTRY REVENUES, GAS USED FOR ELECTRIC GENERATION, BY STATE, 1979[a]

(Thousands)

Division and State	Industrial Revenue			Credits[b]	Total Revenue and Credits
	Firm	Interruptible	Total		
United States	**$1,424,871**	**$1,979,676**	**$3,404,547**	**$721,948**	**$4,126,495**
New England	**0**	**24,680**	**24,680**	**0**	**24,680**
Connecticut	0	0	0	0	0
Maine	0	0	0	0	0
Massachusetts	0	20,200	20,200	0	20,200
New Hampshire	0	0	0	0	0
Rhode Island	0	4,480	4,480	0	4,480
Vermont	0	0	0	0	0
Middle Atlantic	**3,304**	**31,941**	**35,245**	**205,784**	**241,029**
New Jersey	0	25,542	25,542	35,250	60,792
New York	213	6,399	6,612	169,347	175,959
Pennsylvania	3,091	0	3,091	1,187	4,278
East North Central	**105,524**	**75,043**	**180,567**	**9,464**	**190,031**
Illinois	62,572	8,896	71,468	1,232	72,700
Indiana	418	0	418	5,604	6,022
Michigan	42,534	17,318	59,852	0	59,852
Ohio	0	7,383	7,383	159	7,542
Wisconsin	0	41,446	41,446	2,469	43,915
West North Central	**8**	**114,620**	**114,628**	**39,379**	**154,007**
Iowa	0	5,196	5,196	4,990	10,186
Kansas	0	68,442	68,442	26,687	95,129
Minnesota	8	1,793	1,801	513	2,314
Missouri	0	26,056	26,056	7,083	33,139
Nebraska	0	12,988	12,988	53	13,041
North Dakota	0	0	0	0	0
South Dakota	0	145	145	53	198
South Atlantic	**2,144**	**63,525**	**65,669**	**26,612**	**92,281**
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	2,144	54,728	56,872	0	56,872
Georgia	0	7,369	7,369	0	7,369
Maryland	0	0	0	16,866	16,866
North Carolina	0	845	845	0	845
South Carolina	0	583	583	6,073	6,656
Virginia	0	0	0	3,673	3,673
West Virginia	0	0	0	0	0
East South Central	**57,121**	**15,223**	**72,344**	**1,315**	**73,659**
Alabama	0	0	0	0	0
Kentucky	0	0	0	870	870
Mississippi	57,121	15,223	72,344	193	72,537
Tennessee	0	0	0	252	252
West South Central	**1,097,664**	**441,994**	**1,539,658**	**306,135**	**1,845,793**
Arkansas	2,700	0	2,700	0	2,700
Louisiana	152,542	0	152,542	235,592	388,134
Oklahoma	241,009	23,249	264,258	0	264,258
Texas	701,413	418,745	1,120,158	70,543	1,190,701
Mountain	**143,510**	**141,211**	**284,721**	**133,259**	**417,980**
Arizona	24,554	463	25,017	42,387	67,404
Colorado	4,827	61,380	66,207	37,502	103,709
Idaho	0	0	0	0	0
Montana	0	0	0	4,774	4,774
Nevada	98,344	0	98,344	47,670	146,014
New Mexico	15,785	70,187	85,972	908	86,880
Utah	0	9,181	9,181	0	9,181
Wyoming	0	0	0	18	18
Pacific	**15,596**	**1,071,439**	**1,087,035**	**0**	**1,087,035**
Alaska	9,500	0	9,500	0	9,500
California	0	1,071,439	1,071,439	0	1,071,439
Hawaii	0	0	0	0	0
Oregon	0	0	0	0	0
Washington	6,096	0	6,096	0	6,096

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a. Excludes revenues from direct sales by producers to electric utilities.

b. Represents, "Revenues" from transfers of gas for electric generation. Such "Revenues" are credits by the electric department to the gas department of combination gas and electric companies.

TABLE 88

GAS UTILITY INDUSTRY REVENUES FROM LARGE VOLUME SALES, BY TYPE OF INDUSTRY AND BY DIVISION, 1979

(Thousands)

Industry Classification	Total U.S.	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Agriculture, forestry and fisheries	$ 78,068	$ 316	$ 961	$ 17,674	$ 6,239	$ 2,699	$ 365	$ 5,319	$ 3,997	$ 40,498
Petroleum and natural gas production	71,454	0	1	75	9,604	7	2,419	12,368	12,717	34,263
Other mining	101,365	72	0	11,359	845	0	473	17,932	48,753	21,931
Electric services*	4,140,313	24,680	241,029	190,137	167,719	92,281	73,659	1,845,793	417,980	1,087,035
Other transportation, communication, and public utilities	219,342	13,649	4,518	60,422	66,290	2,497	1,105	23,681	9,538	37,642
Hotels, rooming houses, and camps	71,267	473	10,919	26,149	1,791	1,806	0	3,376	1,116	25,637
Laundries, cleaning and dyeing	60,244	124	1,502	25,486	63	797	127	198	0	31,947
Other services	787,536	8,310	44,492	408,187	26,033	29,004	11,680	25,862	21,576	212,392
Other non-manufacturing	438,757	1,557	44,482	209,766	5,652	4,646	5,845	1,887	17,276	147,646
Food and kindred products	747,227	7,732	62,333	272,478	85,813	33,582	14,666	17,734	38,918	213,971
Textile products, apparel, fabrics, etc.	128,759	5,468	13,224	10,335	1,296	70,712	12,583	546	91	14,504
Furniture, lumber, and other wood products	111,230	130	3,468	15,879	2,299	4,297	16,615	14,791	3,254	50,497
Paper and allied products	550,505	3,162	32,301	149,215	8,010	67,362	96,972	31,834	31,697	129,952
Carbon black	57,038	412	0	3,005	32,402	4,668	0	14,010	0	2,541
Chemicals and allied products (except carbon black)	1,319,769	3,610	73,248	324,388	136,463	263,931	102,779	227,951	66,528	120,871
Petroleum refining	766,382	374	28,824	46,704	32,948	12,887	23,496	309,997	26,177	284,995
Rubber and miscellaneous plastic products	118,795	1,217	14,596	49,958	7,192	2,144	13,865	6,349	2,750	20,724
Glass products	403,862	4,777	120,950	132,363	15,388	40,132	12,461	17,279	1,876	58,636
Cement	122,133	328	53	6,578	23,898	11,775	9,696	14,397	13,275	42,133
Clay products, pottery, etc.	213,487	129	26,925	42,378	23,788	67,562	18,537	3,661	8,732	21,775
Other stone products and miscellaneous	225,525	3,082	28,304	53,515	13,721	37,633	7,850	2,192	5,528	73,700
Primary iron and steel industries	1,200,120	8,538	329,959	522,694	71,902	69,239	79,201	3,929	42,346	72,312
Primary non-ferrous industries	481,581	2,468	45,333	186,627	11,800	21,354	37,318	14,761	91,195	70,725
Fabricated metal products, machinery equipment and supplies	587,701	12,037	82,531	344,799	29,420	17,326	26,326	1,984	4,720	68,558
Transportation equipment	232,453	2,555	24,191	144,262	7,439	10,345	5,998	2,130	594	34,939
Other manufacturing	254,127	5,995	32,892	102,107	23,997	12,522	9,403	10,530	4,991	51,690
Public administration	175,420	3,622	23,498	38,936	6,034	25,352	6,674	5,137	12,595	53,572
Total (Sum)*	**$13,664,460**	**$114,817**	**$1,290,534**	**$3,395,476**	**$ 818,046**	**$ 906,560**	**$ 590,113**	**$2,635,608**	**$ 888,220**	**$3,025,086**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**$18,397,181**	**$297,850**	**$2,122,771**	**$4,689,343**	**$1,249,105**	**$1,499,412**	**$ 753,750**	**$3,306,839**	**$1,193,408**	**$3,284,703**
Total Gas Utility Industry Commercial, Industrial and "Other" sales	**$24,114,193**	**$529,061**	**$2 374,851**	**$5,519,865**	**$1,886,807**	**$2,049,211**	**$1,267,859**	**$5,761,181**	**$1,332,691**	**$3,392,667**

*Includes the following "revenues" from transfers of gas for electric generation not included in Total Commercial, Industrial and "Other" revenues of companies reporting this table or in Total Gas Industry revenues. Such "revenues" represent credits by the electric department to the gas department of combination gas and electric companies.

$721,948	$0	$205,784	$9,464	$39,379	$26,612	$1,315	$306,135	$133,259	$0

TABLE 89

REVENUES FROM LARGE VOLUME GAS UTILITY INDUSTRY SALES, BY TYPE OF INDUSTRY, 1955-1979

(Thousands)

Industry Classification	1955	1960	1965	1970	1975	1978	1979
Agriculture, forestry and fisheries	$ 2.391	$ 3,447	$ 4,553	$ 13.373	$ 41,816	$ 48,298	$ 78,068
Petroleum and natural gas production	7,387	13,023	23,092	29,116	67,556	64,608	71,454
Other mining	3,122	10,738	18,697	18,744	44,664	75,306	101,365
Electric services[a]	200,649	366,946	461,037	750,879	1,482,516	2,662,512	4,140,313
Other transportation, communications and public utilities	3,101	6,212	12,867	36,820	99,971	141,326	219,342
Hotels, rooming houses, camps	2,538	5,225	12,317	34,089	85,216	45,833	71,267
Laundries, cleaning and dyeing	682	1,495	7,969	12,508	30,095	37,535	60,244
Other services	8,722	11,615	25,434	82,737	274,992	553,420	787,536
Other non-manufacturing	11,118	13,826	32,472	105,186	228,982	294,102	438,757
Ordnance	4,025	5,362	5,938	14,216	b	b	b
Food and kindred products	33,467	57,331	88,419	140,016	352,172	523,582	747,227
Textile products, apparel, fabrics, etc.	4,189	7,459	16,613	32,563	58,468	75,479	128,759
Furniture, lumber and other wood products	2,055	7,452	18,713	25,097	65,210	93,022	111,230
Paper and allied products	24,917	54,020	80,392	137,086	258,795	362,355	550,505
Carbon black	396	2,435	9,198	12,613	26,646	49,694	57,038
Chemicals and allied products (except carbon black)	61,341	154,556	208,820	303,261	821,397	1,029,663	1,319,769
Petroleum refining	49,685	87,605	88,023	167,312	502,402	483,604	766,382
Rubber and miscellaneous plastic products	8,261	5,454	12,314	20,483	47,694	78,466	118,795
Glass products	30,232	59,693	73,844	92,362	183,233	353,983	403,862
Cement	28,303	47,540	52,129	81,001	130,210	101,029	122,133
Clay products, pottery, etc.	24,242	49,764	60,873	63,707	111,670	161,513	213,487
Other stone products and miscellaneous	7,798	11,335	26,502	61,841	103,389	183,732	225,525
Primary iron and steel industries	72,362	149,646	232,470	313,595	568,959	1,062,685	1,200,120
Primary non-ferrous industries	42,724	58,181	88,218	89,949	268,145	371,069	481,581
Fabricated metal products, machinery equipment and supplies	30,284	55,360	93,760	162,290	319,800	502,901	587,701
Transportation equipment	20,041	30,767	53,093	92,514	194,678	201,219	232,453
Other manufacturing	8,143	13,053	23,883	45,777	129,238	210,182	254,127
Public Administration	c	c	c	c	74,956	104,649	175,420
Total (Sum)[a]	**$692,175**	**$1,289,540**	**$1,831,640**	**$2,939,135**	**$ 6,572,870**	**$ 9,871,767**	**$13,664,460**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**$812,651**	**$1,514,995**	**$2,123,185**	**$3,028,083**	**$ 9,473,153**	**$14,531,845**	**$18,397,181**
Total Gas Utility Industry Commercial, Industrial and "Other" sales[d]	**$1,018,159**	**$1,716,509**	**$2,323,769**	**$3,454,830**	**$10,628,839**	**$19,211,056**	**$24,114,193**

a. Includes the following "revenues from transfers of gas for electric generation not included in Total Commercial Industrial and "Other" revenues of companies reporting this table or in Total Gas Utility Industry revenues. Such "revenues" represent credits by the electric department to the gas department of combination gas and electric companies. "Revenues" in thousands of dollars are: 1955-39,196; 1960-73,887; 1965-72,919; 1970-92,443; 1975-293,936; 1978-330,572; and 1979-721,948.

b. Classification eliminated.

c. New classification in 1972.

d. Includes Industrial and "Other" sales only prior to 1971.

TABLE 90
GAS UTILITY INDUSTRY REVENUES, BY QUARTER AND CLASS OF SERVICE, 1955-1979

(Thousands)

Year and Quarter	Total	Residential	Commercial	Industrial*	Other*
1955					
First	$1,177,002	$ 776,007	$ 162,217	$ 217,670	$ 21,108
Second	761,042	422,305	86,696	232,769	19,272
Third	558,162	244,971	53,951	240,137	19,103
Fourth	933,803	549,888	116,440	246,459	21,016
1960					
First	2,033,980	1,304,810	297,337	385,053	46,780
Second	1,278,858	701,603	153,028	389,985	34,242
Third	860,134	358,237	83,575	388,519	29,803
Fourth	1,431,263	803,400	186,039	399,440	42,384
1965					
First	2,688,389	1,667,580	438,864	528,598	53,347
Second	1,713,833	909,991	230,269	535,235	38,338
Third	1,151,283	461,313	121,320	531,538	37,112
Fourth	1,847,096	986,096	261,769	552,222	47,009
1970					
First	3,742,316	2,197,999	687,117	780,927	76,273
Second	2,342,672	1,136,333	346,748	797,906	61,685
Third	1,624,621	578,747	182,163	803,503	60,208
Fourth	2,573,002	1,294,256	404,418	798,870	75,458
1972					
First	4,363,438	2,422,141	826,461	1,007,653	197,183
Second	2,837,142	1,318,312	439,005	998,484	81,341
Third	1,981,293	694,109	234,499	970,948	81,737
Fourth	3,283,362	1,659,609	563,838	965,926	93,989
1973					
First	4,553,714	2,545,758	880,504	1,018,622	108,830
Second	3,053,710	1,430,147	484,491	1,032,597	106,475
Third	2,135,809	730,903	266,897	1,055,050	82,959
Fourth	3,244,039	1,540,180	540,568	1,090,445	72,846
1974					
First	4,962,348	2,637,502	936,945	1,282,042	105,859
Second	3,524,656	1,541,800	550,486	1,346,119	86,251
Third	2,658,833	827,067	334,506	1,386,447	110,813
Fourth	4,096,644	1,893,026	717,363	1,376,531	109,724
1975					
First	6,186,624	3,303,345	1,241,263	1,501,044	140,972
Second	4,443,028	1,972,484	734,954	1,619,141	116,449
Third	3,389,737	987,079	438,859	1,776,684	187,115
Fourth	5,054,934	2,182,576	887,491	1,821,229	163,638
1976					
First	7,640,244	3,890,616	1,531,385	2,130,169	88,083
Second	5,130,081	1,974,961	781,438	2,311,382	62,300
Third	4,192,685	1,109,426	515,383	2,497,831	70,045
Fourth	6,738,200	2,966,010	1,246,803	2,434,558	90,828
1977					
First	9,847,887	5,157,004	2,044,743	2,517,576	128,563
Second	5,898,652	2,113,485	930,741	2,766,049	83,377
Third	5,032,784	1,220,430	664,815	3,066,653	80,886
Fourth	7,523,878	3,044,890	1,339,590	3,034,940	104,459
1978					
First	11,443,834	5,794,334	2,412,856	3,080,601	156,043
Second	6,946,269	2,533,334	1,125,102	3,198,846	88,987
Third	5,548,952	1,309,307	690,271	3,463,219	86,155
Fourth	8,210,868	3,301,893	1,467,438	3,322,009	119,528
1979					
First	13,317,971	6,544,017	2,744,291	3,828,209	201,455
Second	8,158,475	2,823,066	1,259,409	3,989,813	86,187
Third	6,809,065	1,517,166	796,336	4,414,613	80,949
Fourth	10,661,631	3,948,701	1,823,730	4,728,234	160,966

*Prior to 1976, "Other" electric generation (see Table 72) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

REVENUES

TABLE 91

REVENUES FROM SALES OF PRODUCERS OF NATURAL GAS TO INTERSTATE TRANSMISSION COMPANIES, BY STATE, 1960-1975[a]

Division and State	1960	1965	1970	1974	1975	
	(Thousands of dollars)	(Thousands of dollars)	(Thousands of dollars)	(Thousands of dollars)	(Thousands of dollars)	Percent of total
Grand Total	**$1,265,381**	**$1,746,967**	**$2,646,161**	**$3,894,705**	**$5,273,464**	**100.0**
Total United States	**1,237,360**	**1,648,337**	**2,451,768**	**3,392,694**	**4,183,906**	**79.3**
New England	**0**	**0**	**0**	**0**	**0**	**0.0**
Middle Atlantic	**13,236**	**6,397**	**5,787**	**9,628**	**13,237**	**0.8**
New Jersey	0	0	0	0	0	0.0
New York	1,052	635	345	1,676	2,605	b
Pennsylvania	12,184	5,762	5,442	7,952	10,632	0.2
East North Central	**4,117**	**3,787**	**7,406**	**10,741**	**13,972**	**0.3**
Illinois	109	0	0	0	0	0.0
Indiana	0	18	7	0	33	b
Michigan	6	0	23	0	0	0.0
Ohio	4,002	3,769	7,376	10,741	13,939	0.3
Wisconsin	0	0	0	0	0	0.0
West North Central	**60,945**	**81,492**	**93,836**	**119,560**	**117,248**	**2.2**
Iowa	0	0	0	0	0	0.0
Kansas	58,715	77,517	90,266	115,449	111,470	2.1
Minnesota	0	0	0	0	0	0.0
Missouri	0	0	0	0	0	0.0
Nebraska	1,224	829	513	857	1,538	b
North Dakota	1,006	3,146	3,057	3,254	4,240	0.1
South Dakota	0	0	0	0	0	0.0
South Atlantic	**19,289**	**24,777**	**34,574**	**36,823**	**34,443**	**0.7**
Delaware	0	0	0	0	0	0.0
District of Columbia	0	0	0	0	0	0.0
Florida	0	0	c	11,335	8,298	0.2
Georgia	0	0	0	0	0	0.0
Maryland	1,082	22	26	12	2	b
North Carolina	0	0	0	0	0	0.0
South Carolina	0	0	0	0	0	0.0
Virginia	621	536	487	370	363	b
West Virginia	17,586	24,219	34,061	25,106	25,780	0.5
East South Central	**36,549**	**33,310**	**26,696**	**21,784**	**18,829**	**0.4**
Alabama	3	9	c	4,083	3,713	0.1
Kentucky	4,714	6,188	4,090	6,068	4,952	0.1
Mississippi	31,832	27,113	22,606	11,633	10,164	0.2
Tennessee	0	0	c	0	0	0.0
West South Central	**1,015,555**	**1,377,977**	**2,116,827**	**2,843,226**	**3,507,135**	**66.5**
Arkansas	4,914	7,974	21,807	18,986	21,229	0.4
Louisiana	461,227	692,317	1,181,529	1,562,025	1,944,735	36.9
Oklahoma	63,483	125,226	205,715	256,614	261,398	5.0
Texas	485,931	552,460	707,776	1,005,601	1,279,773	24.3
Mountain	**87,669**	**120,597**	**166,642**	**350,930**	**479,042**	**9.1**
Arizona	0	185	191	3	c	b
Colorado	6,493	5,740	8,665	26,222	48,732	0.9
Idaho	0	0	0	0	0	0.0
Montana	103	57	596	8,611	8,333	0.2
Nevada	0	0	0	0	0	0.0
New Mexico	54,504	81,056	114,120	254,575	327,143	6.2
Utah	7,840	6,806	5,250	8,061	13,438	0.3
Wyoming	18,729	26,753	37,820	53,458	81,396	1.5
Pacific	**0**	**0**	**0**	**0**	**0**	**0.0**
Canada	**21,052**	**89,706**	**187,578**	**501,974**	**1,089,558**	**20.7**
Mexico	**6,969**	**8,924**	**6,815**	**37**	**0**	**0.0**

a. Data refer to cost of natural gas purchased from domestic and foreign producers by interstate natural gas pipelines. These pipeline companies accounted for about 70 percent of all natural gas produced and marketed in the United States.
b. Less than 0.1 percent.
c. Less than $500.
Source: Federal Power Commission. *Sales of Producers of Natural Gas to Interstate Pipeline Companies.*

SECTION X
PRICES

	1979	% Change 79/78
Gas Utility Industry ($/MMBtu)		
Total	2.52	+15.6
Residential	2.92	+15.4
Commercial	2.66	+16.7
Industrial	2.24	+17.3
Other	1.67	+11.3
Wellhead ($/Mcf)	1.14	+26.4
City Gate	1.81	+23.6
Electric	12.69	+ 7.5
Number 2 Fuel Oil	5.24	+43.2

TABLE 92

AVERAGE CONSUMER PRICE INDEXES, 1955-1979[a]

(1967 = 100)

Year	All Items	Total Food	Apparel[b] and Upkeep	Shelter[c]	Gas and Electricity	Fuel Oil[d] and Coal	House Furnishing[e] and Operation	Trans-portation	Medical Care	Personal Care	Reading and Recreation	Other Goods and Services[f]
1955	80.2	81.6	84.8	79.1	87.5	82.4	99.2	77.4	64.8	77.9	76.7	79.8
1956	81.4	82.2	86.3	80.4	88.4	85.9	98.1	78.8	67.2	81.1	77.8	81.0
1957	84.3	84.9	87.5	83.4	89.3	90.3	99.7	83.3	69.9	84.1	80.7	83.3
1958	86.6	88.5	87.6	85.1	92.4	88.7	99.0	86.0	73.2	86.9	83.9	84.4
1959	87.3	87.0	88.3	86.0	94.8	89.8	99.0	89.6	76.4	88.7	85.3	86.1
1960	88.6	88.0	89.6	87.8	98.6	89.2	99.3	89.6	79.1	90.1	87.3	87.8
1961	89.6	89.1	90.2	88.5	99.4	91.0	98.7	90.6	81.4	90.6	89.3	88.5
1962	90.6	89.9	90.5	89.6	99.4	91.5	98.1	92.5	83.5	92.2	91.3	89.1
1963	91.7	91.2	91.9	90.7	99.4	93.2	97.7	93.0	85.6	93.4	92.8	90.6
1964	92.2	92.4	92.7	92.2	99.4	92.7	97.6	94.3	87.3	94.6	95.0	92.0
1965	94.5	94.4	93.7	93.8	99.4	94.6	97.1	95.9	89.5	95.2	94.2	
1966	97.2	99.1	96.1	96.8	99.6	97.0	98.0	97.2	97.1	97.5	97.2	
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.6	105.4	104.8	100.9	103.1	103.9	103.2	106.1	104.2	104.7	104.6
1969	109.8	108.9	111.5	113.3	102.8	105.6	109.0	107.2	113.4	109.3	108.7	110.3
1970	116.3	114.9	116.1	123.6	107.3	110.1	113.4	112.7	120.6	113.2	113.4	116.2
1971	121.3	118.4	119.8	128.8	114.7	117.5	118.1	118.6	128.4	116.8	119.3	122.2
1972	125.3	123.5	122.3	134.5	120.5	118.5	121.0	119.9	132.5	119.8	122.8	126.1
1973	133.1	141.4	126.8	140.7	126.4	136.0	124.9	123.8	137.7	125.2	125.9	129.0
1974	147.7	161.7	136.2	154.4	145.8	214.6	140.5	137.7	150.5	138.3	133.8	137.2
1975	161.2	175.4	142.3	169.7	169.6	235.3	158.1	150.6	168.6	150.7	144.4	147.4
1976	170.5	180.8	147.6	179.0	189.0	250.8	168.5	165.5	184.7	160.5	151.2	153.3
1977	181.5	192.2	154.2	191.1	213.4	283.4	177.0	177.2	202.4	170.9	157.9	159.2
1978	195.3	211.2	159.5	210.3	232.6	298.3	177.0	185.8	219.4	182.0	g	183.2
1979	217.7	234.7	166.4	240.3	257.6	403.6	188.9	212.8	240.1	195.5	g	196.3

a. Applicable to "wage-earners and clerical workers in urban United States."
b. Includes apparel only prior to June 1964.
c. Includes hotel and motel rates.
d. Starting in 1978 includes bottled gas.
e. Includes house furnishings only prior to 1969.
f. Prior to 1978 included alcoholic beverages, now found in food and beverages; now includes personal care and education—related expenses, formerly found in health and recreation.
g. Not available.
Source: Bureau of Labor Statistics. *The Consumer Price Index.*

TABLE 93
AVERAGE WELLHEAD PRICES OF NATURAL GAS, BY STATE, 1955-1978*

(¢/MCF)

Division and State	1955	1960	1965	1970	1975	1977	1978
United States	**10.4¢**	**14.0¢**	**15.6¢**	**17.1¢**	**44.5¢**	**79.9¢**	**90.5¢**
New England	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Middle Atlantic	**29.9**	**31.8**	**26.9**	**28.0**	**68.0**	**83.8**	**90.1**
New Jersey	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New York	29.5	30.9	30.8	30.3	74.0	116.0	119.0
Pennsylvania	29.9	31.8	26.7	27.9	67.5	80.0	86.0
East North Central	**19.0**	**21.0**	**23.1**	**26.4**	**66.6**	**117.7**	**135.9**
Illinois	14.2	12.5	11.7	15.7	70.0	120.0	129.0
Indiana	12.4	18.8	23.6	23.7	39.0	69.0	71.0
Michigan	11.5	21.4	25.1	26.7	63.4	101.0	119.7
Ohio	22.5	23.5	23.6	27.1	70.6	139.7	157.0
Wisconsin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
West North Central	**12.0**	**11.8**	**13.4**	**14.1**	**17.5**	**48.1**	**56.7**
Iowa	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kansas	11.1	11.7	13.3	14.0	17.2	48.5	57.0
Minnesota	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Missouri	20.0	25.0	24.5	24.5	34.0	42.0	0.0
Nebraska	20.4	17.5	14.6	17.1	54.1	65.2	68.0
North Dakota	7.7	11.4	16.0	16.4	23.0	35.3	46.2
South Dakota	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Atlantic	**23.8**	**26.2**	**23.4**	**25.5**	**50.4**	**74.6**	**86.6**
Delaware	0.0	0.0	0.0	0.0	0.0	0.0	0.0
District of Columbia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Florida	10.0	16.2	12.9	0.0	97.3	108.9	139.0
Georgia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maryland	20.1	26.6	25.2	24.9	27.0	39.0	61.4
North Carolina	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Carolina	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Virginia	26.8	27.1	29.9	30.8	51.5	126.0	131.3
West Virginia	23.8	26.2	23.5	25.4	36.9	61.0	65.8
East South Central	**14.0**	**20.5**	**19.3**	**20.7**	**59.3**	**88.6**	**111.1**
Alabama	6.8	7.3	12.7	13.9	87.0	147.0	150.0
Kentucky	23.7	24.4	23.6	24.6	54.0	55.0	58.0
Mississippi	9.6	18.8	17.3	18.4	49.6	73.0	114.6
Tennessee	12.8	17.5	19.0	19.9	43.0	74.0	164.0
West South Central	**8.7**	**13.1**	**14.6**	**16.7**	**45.6**	**79.9**	**90.8**
Arkansas	5.6	11.9	15.6	16.3	34.7	58.5	75.0
Louisiana	11.3	17.1	18.2	19.3	42.3	70.3	83.6
Oklahoma	7.4	11.9	13.8	15.6	32.0	79.0	90.2
Texas	8.0	11.3	12.9	14.4	51.9	90.3	99.5
Mountain	**8.9**	**11.2**	**12.1**	**14.3**	**38.2**	**77.0**	**92.0**
Arizona	0.0	0.0	12.1	17.1	28.0	33.5	37.0
Colorado	9.4	11.9	12.9	14.7	48.0	81.0	84.0
Idaho	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Montana	6.7	7.1	8.2	10.3	43.3	71.9	84.7
Nevada	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Mexico	8.6	10.7	11.8	14.3	40.5	81.0	98.8
Utah	13.9	18.0	12.5	15.1	48.0	61.2	64.3
Wyoming	8.5	12.0	13.5	14.7	33.7	64.0	79.3
Pacific	**22.2**	**26.7**	**30.8**	**31.0**	**56.7**	**88.0**	**102.7**
Alaska	0.0	12.2	24.8	24.6	30.2	40.2	52.1
California	22.2	26.7	30.9	32.1	70.0	116.9	135.7
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Washington	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*Reflects price at first point of transfer, representing sales made by producers. The 1979 U.S. average wellhead price of natural gas is 114.4¢.

Source: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual.*

TABLE 94

GAS UTILITY INDUSTRY AVERAGE PRICES BY CLASS OF SERVICE, 1955-1979*

($/MMBtu)

Year	Total	Residential	Commercial	Industrial	Other
1955	$0.52	$0.90	$0.70	$0.27	$0.29
1956	0.53	0.91	0.72	0.28	0.29
1957	0.54	0.92	0.72	0.28	0.28
1958	0.57	0.94	0.75	0.30	0.29
1959	0.58	0.97	0.76	0.31	0.31
1960	0.60	1.00	0.79	0.33	0.33
1961	0.62	1.02	0.80	0.35	0.34
1962	0.63	1.02	0.80	0.35	0.34
1963	0.62	1.02	0.80	0.35	0.35
1964	0.62	1.01	0.78	0.35	0.36
1965	0.62	1.01	0.78	0.35	0.36
1966	0.61	1.00	0.78	0.35	0.36
1967	0.61	1.00	0.78	0.35	0.36
1968	0.61	1.00	0.77	0.35	0.36
1969	0.62	1.01	0.78	0.36	0.39
1970	0.64	1.06	0.81	0.38	0.41
1971	0.68	1.12	0.85	0.41	0.38
1972	0.73	1.19	0.91	0.45	0.41
1973	0.79	1.25	0.95	0.50	0.44
1974	0.95	1.42	1.11	0.66	0.60
1975	1.29	1.69	1.38	0.99	0.94
1976	1.60	1.98	1.68	1.32	1.15
1977	1.97	2.33	2.07	1.70	1.45
1978	2.18	2.53	2.28	1.91	1.50
1979	2.52	2.92	2.66	2.24	1.67

*Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.

TABLE 95
GAS UTILITY INDUSTRY AVERAGE PRICES, BY STATE AND CLASS OF SERVICE, 1979

($/MMBtu)

		Class of Service			
Division and State	Total	Residential	Commercial	Industrial[a]	Other
United States	**$2.52**	**$2.92**	**$2.66**	**$2.24**	**$1.67**
New England	**4.04**	**4.55**	**3.95**	**3.20**	**3.09**
Connecticut	4.15	4.72	3.89	3.44	4.25
Maine	4.56	5.93	4.58	3.59	b
Massachusetts	4.10	4.58	4.01	3.17	3.15
New Hampshire	3.51	3.82	3.39	3.28	2.73
Rhode Island	3.65	4.25	3.91	2.71	b
Vermont	3.62	3.88	3.46	3.51	4.62
Middle Atlantic	**3.27**	**3.65**	**3.29**	**2.69**	**2.94**
New Jersey	3.78	4.16	3.86	3.05	3.95
New York	3.57	3.93	3.34	2.88	3.02
Pennsylvania	2.81	3.09	2.90	2.51	2.74
East North Central	**2.59**	**2.79**	**2.60**	**2.36**	**2.46**
Illinois	2.72	2.90	2.69	2.52	2.22
Indiana	2.38	2.65	2.45	2.16	2.34
Michigan	2.51	2.63	2.56	2.34	2.00
Ohio	2.57	2.78	2.57	2.32	2.51
Wisconsin	2.66	3.02	2.67	2.40	3.01
West North Central	**2.20**	**2.55**	**2.26**	**1.86**	**1.47**
Iowa	2.36	2.70	2.41	2.05	2.35
Kansas	1.72	1.85	1.55	1.71	1.41
Minnesota	2.50	2.89	2.67	2.09	0.98
Missouri	2.40	2.69	2.39	1.84	2.16
Nebraska	2.00	2.34	2.02	1.69	1.56
North Dakota	2.66	2.87	2.44	2.67	1.96
South Dakota	2.38	2.61	2.29	1.99	1.27
South Atlantic	**2.63**	**3.46**	**2.84**	**2.21**	**1.55**
Delaware	3.12	3.91	3.48	2.55	1.54
District of Columbia	3.58	3.74	3.46	3.09	b
Florida	2.09	3.70	2.76	1.96	1.50
Georgia	2.58	3.33	2.46	2.15	2.44
Maryland	3.18	3.75	3.40	2.44	2.10
North Carolina	2.90	3.49	3.12	2.58	2.61
South Carolina	2.21	3.39	2.50	1.96	1.22
Virginia	3.00	3.63	3.10	2.37	2.41
West Virginia	2.60	2.92	2.57	2.37	2.61
East South Central	**2.30**	**2.69**	**2.43**	**2.11**	**1.91**
Alabama	2.48	3.36	2.51	2.15	1.41
Kentucky	2.23	2.39	2.28	2.04	1.96
Mississippi	2.28	2.79	2.51	2.11	2.11
Tennessee	2.19	2.34	2.47	2.08	1.34
West South Central	**2.17**	**2.63**	**2.36**	**2.11**	**1.29**
Arkansas	1.69	2.01	1.79	1.56	1.79
Louisiana	2.02	2.57	2.27	1.93	1.56
Oklahoma	1.78	2.09	1.89	1.69	1.60
Texas	2.36	2.93	2.64	2.33	1.26
Mountain	**2.26**	**2.58**	**2.36**	**2.02**	**2.03**
Arizona	2.45	3.33	2.53	2.10	2.20
Colorado	2.27	2.49	2.35	1.95	2.02
Idaho	2.83	3.69	3.19	2.48	b
Montana	2.15	2.22	1.96	2.25	2.09
Nevada	2.54	2.94	2.90	2.35	2.57
New Mexico	2.20	2.64	2.29	2.02	2.09
Utah	1.84	2.13	1.79	1.59	3.54
Wyoming	1.99	2.49	2.33	1.65	0.60
Pacific	**2.54**	**2.50**	**2.75**	**2.59**	**1.69**
Alaska	1.21	1.87	1.32	0.89	0.84
California	2.45	2.38	2.63	2.45	3.01
Hawaii	9.34	10.83	9.09	8.84	b
Oregon	3.33	4.13	3.66	2.93	b
Washington	3.10	3.70	3.28	2.78	2.97

a. Includes Electric Generation.
b. No sales reported.

TABLE 96
AVERAGE RESIDENTIAL GAS PRICES, BY STATE, 1955-1979

($/MMBtu)

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	**$0.90**	**$1.00**	**$1.01**	**$1.06**	**$1.69**	**$2.53**	**$2.92**
New England	**2.35**	**2.08**	**1.89**	**1.88**	**3.22**	**4.13**	**4.55**
Connecticut	2.35	2.02	1.83	1.93	3.27	4.42	4.72
Maine	2.84	3.01	3.33	2.89	4.25	5.40	5.93
Massachusetts	2.30	2.11	1.91	1.87	3.20	4.07	4.58
New Hampshire	2.30	1.99	1.85	1.77	2.46	3.41	3.82
Rhode Island	2.54	1.92	1.80	1.76	3.16	4.01	4.25
Vermont	3.43	3.40	3.44	1.78	2.80	3.61	3.88
Middle Atlantic	**1.24**	**1.32**	**1.31**	**1.34**	**2.26**	**3.31**	**3.65**
New Jersey	1.87	1.79	1.69	1.62	2.59	3.80	4.16
New York	1.40	1.42	1.35	1.38	2.43	3.53	3.93
Pennsylvania	0.96	1.08	1.10	1.17	1.90	2.81	3.09
East North Central	**0.86**	**0.93**	**0.95**	**0.99**	**1.56**	**2.39**	**2.79**
Illinois	1.04	1.11	1.02	1.02	1.58	2.43	2.90
Indiana	1.04	0.98	0.96	1.05	1.45	2.18	2.65
Michigan	0.97	0.94	0.97	1.00	1.60	2.30	2.63
Ohio	0.64	0.76	0.83	0.89	1.51	2.43	2.78
Wisconsin	1.37	1.27	1.14	1.21	1.71	2.58	3.02
West North Central	**0.75**	**0.83**	**0.85**	**0.92**	**1.37**	**2.17**	**2.55**
Iowa	0.84	0.93	0.92	0.96	1.41	2.30	2.70
Kansas	0.54	0.57	0.60	0.69	0.97	1.60	1.85
Minnesota	0.90	1.11	1.05	1.08	1.59	2.50	2.89
Missouri	0.75	0.79	0.84	0.93	1.45	2.27	2.69
Nebraska	0.79	0.85	0.83	0.86	1.26	1.96	2.34
North Dakota	0.84	0.84	0.86	1.05	1.50	2.32	2.87
South Dakota	0.87	0.93	0.95	1.04	1.40	2.12	2.61
South Atlantic	**1.03**	**1.22**	**1.23**	**1.23**	**2.02**	**3.02**	**3.46**
Delaware	1.90	1.72	1.59	1.50	2.34	3.94	3.91
District of Columbia	1.39	1.53	1.47	1.44	2.40	3.46	3.74
Florida	2.54	2.76	2.51	1.81	2.78	3.33	3.70
Georgia	0.77	0.97	1.03	0.98	1.75	2.71	3.33
Maryland	1.37	1.48	1.39	1.43	2.31	3.54	3.75
North Carolina	1.90	1.41	1.38	1.29	2.02	3.03	3.49
South Carolina	2.00	1.43	1.39	1.34	2.08	2.93	3.39
Virginia	1.48	1.55	1.45	1.42	2.29	3.31	3.63
West Virginia	0.51	0.79	0.80	0.87	1.47	2.32	2.92
East South Central	**0.76**	**0.90**	**0.91**	**0.92**	**1.43**	**2.25**	**2.69**
Alabama	0.91	1.06	1.11	1.10	1.72	2.73	3.36
Kentucky	0.63	0.78	0.80	0.84	1.30	2.02	2.39
Mississippi	0.75	0.88	0.87	0.88	1.41	2.37	2.79
Tennessee	0.82	0.94	0.90	0.89	1.33	1.98	2.34
West South Central	**0.64**	**0.70**	**0.77**	**0.85**	**1.35**	**2.30**	**2.63**
Arkansas	0.58	0.66	0.75	0.78	1.12	1.67	2.01
Louisiana	0.61	0.64	0.72	0.75	1.32	2.23	2.57
Oklahoma	0.57	0.69	0.75	0.80	1.15	1.88	2.09
Texas	0.68	0.73	0.80	0.92	1.47	2.57	2.93
Mountain	**0.64**	**0.72**	**0.74**	**0.83**	**1.34**	**2.19**	**2.58**
Arizona	0.89	0.97	1.04	1.14	1.83	2.97	3.33
Colorado	0.64	0.67	0.67	0.71	1.16	1.90	2.49
Idaho	2.30	1.26	1.22	1.34	2.25	3.37	3.69
Montana	0.52	0.60	0.63	0.84	1.18	2.05	2.22
Nevada	1.66	1.47	1.30	1.31	1.81	2.46	2.94
New Mexico	0.68	0.74	0.71	0.84	1.37	2.38	2.64
Utah	0.56	0.63	0.64	0.70	1.12	1.97	2.13
Wyoming	0.52	0.59	0.61	0.65	0.99	2.01	2.49
Pacific	**0.74**	**0.91**	**0.91**	**0.97**	**1.58**	**2.04**	**2.50**
Alaska	*	*	1.48	1.42	1.48	1.81	1.87
California	0.72	0.88	0.87	0.93	1.52	1.90	2.38
Hawaii	*	3.65	3.74	3.56	7.97	9.03	10.83
Oregon	1.95	1.56	1.52	1.44	2.41	3.67	4.13
Washington	2.69	1.41	1.32	1.29	2.12	3.29	3.70

* Not available.

TABLE 97
GAS UTILITY INDUSTRY AVERAGE PRICES, BY STATE, 1955–1979[a]

($/MMBtu)

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	**$0.52**	**$0.60**	**$0.62**	**$0.64**	**$1.29**	**$2.18**	**$2.52**
New England	**2.11**	**1.77**	**1.60**	**1.60**	**2.87**	**3.71**	**4.04**
Connecticut	1.98	1.66	1.51	1.60	2.93	3.91	4.15
Maine	2.53	2.78	2.96	2.23	3.04	4.17	4.56
Massachusetts	2.11	1.82	1.63	1.64	2.91	3.67	4.10
New Hampshire	2.19	1.71	1.71	1.54	2.21	3.21	3.51
Rhode Island	2.32	1.58	1.46	1.36	2.82	3.66	3.65
Vermont	3.45	3.49	2.93	2.22	2.06	3.29	3.62
Middle Atlantic	**1.01**	**1.07**	**1.04**	**1.06**	**1.97**	**2.97**	**3.27**
New Jersey	1.93	1.53	1.38	1.26	2.31	3.54	3.78
New York	1.32	1.29	1.20	1.21	2.14	3.19	3.57
Pennsylvania	0.72	0.81	0.81	0.87	1.68	2.55	2.81
East North Central	**0.66**	**0.74**	**0.73**	**0.74**	**1.34**	**2.20**	**2.59**
Illinois	0.61	0.77	0.74	0.73	1.35	2.27	2.72
Indiana	0.69	0.66	0.63	0.71	1.16	1.93	2.38
Michigan	0.86	0.81	0.80	0.78	1.43	2.17	2.51
Ohio	0.57	0.68	0.70	0.73	1.35	2.26	2.57
Wisconsin	1.15	1.02	0.82	0.80	1.31	2.26	2.66
West North Central	**0.47**	**0.52**	**0.53**	**0.56**	**1.00**	**1.83**	**2.20**
Iowa	0.54	0.61	0.62	0.62	1.04	1.96	2.36
Kansas	0.31	0.33	0.36	0.39	0.69	1.42	1.72
Minnesota	0.62	0.71	0.68	0.67	1.19	2.11	2.50
Missouri	0.51	0.56	0.56	0.54	1.18	1.99	2.40
Nebraska	0.48	0.52	0.51	0.51	0.90	1.64	2.00
North Dakota	0.68	0.67	0.68	0.82	1.26	2.11	2.66
South Dakota	0.52	0.58	0.65	0.71	1.05	1.87	2.38
South Atlantic	**0.64**	**0.73**	**0.72**	**0.72**	**1.39**	**2.35**	**2.63**
Delaware	1.69	1.14	0.96	0.93	1.73	3.20	3.12
District of Columbia	1.33	1.45	1.36	1.28	2.21	3.23	3.58
Florida	0.65	0.52	0.51	0.55	1.15	1.76	2.09
Georgia	0.40	0.55	0.61	0.57	1.12	2.12	2.58
Maryland	1.24	1.32	1.17	1.13	1.97	3.11	3.18
North Carolina	0.95	0.74	0.74	0.70	1.58	2.74	2.90
South Carolina	0.60	0.57	0.58	0.62	1.10	1.93	2.21
Virginia	0.98	1.05	0.98	0.95	1.78	2.83	3.00
West Virginia	0.43	0.60	0.59	0.64	1.24	2.10	2.60
East South Central	**0.39**	**0.52**	**0.50**	**0.51**	**1.03**	**1.91**	**2.30**
Alabama	0.38	0.52	0.51	0.52	1.04	2.02	2.48
Kentucky	0.53	0.63	0.64	0.67	1.11	1.87	2.23
Mississippi	0.29	0.41	0.39	0.38	0.95	1.88	2.28
Tennessee	0.43	0.54	0.50	0.53	1.00	1.83	2.19
West South Central	**0.23**	**0.29**	**0.32**	**0.35**	**0.99**	**1.94**	**2.17**
Arkansas	0.24	0.33	0.36	0.37	0.80	1.43	1.69
Louisiana	0.20	0.26	0.28	0.30	0.85	1.75	2.02
Oklahoma	0.31	0.35	0.40	0.46	0.79	1.56	1.78
Texas	0.23	0.28	0.31	0.35	1.10	2.14	2.36
Mountain	**0.38**	**0.43**	**0.46**	**0.49**	**0.99**	**1.78**	**2.26**
Arizona	0.39	0.47	0.52	0.57	1.19	1.89	2.45
Colorado	0.40	0.43	0.45	0.48	0.90	1.66	2.27
Idaho	b	0.53	0.57	0.67	1.48	2.50	2.83
Montana	0.36	0.43	0.47	0.54	1.03	1.85	2.15
Nevada	0.86	0.62	0.59	0.58	1.30	1.99	2.54
New Mexico	0.33	0.34	0.41	0.42	0.88	1.83	2.20
Utah	0.38	0.44	0.43	0.46	0.85	1.56	1.84
Wyoming	0.36	0.36	0.38	0.34	0.70	1.56	1.99
Pacific	**0.50**	**0.59**	**0.57**	**0.58**	**1.31**	**2.15**	**2.54**
Alaska	b	b	0.88	0.70	0.81	1.16	1.21
California	0.48	0.59	0.55	0.56	1.26	2.07	2.45
Hawaii	b	3.13	3.03	2.76	6.78	7.60	9.34
Oregon	1.94	0.78	0.71	0.74	1.80	2.89	3.33
Washington	2.46	0.59	0.60	0.65	1.55	2.70	3.10

[a] Excludes sales for resale and revenues from sale for resale.

[b] Not available.

TABLE 98

AVERAGE GAS PRICES OF WELLHEAD, CITY GATE, AND END-USER LEVEL 1955–1979

Year	Wellhead ($/Mcf*)	City Gate ($/MMBtu*)	Cost to the Ultimate Customer ($/MMBtu*)
1955	0.104	0.271	0.518
1956	0.108	0.275	0.531
1957	0.113	0.284	0.536
1958	0.119	0.306	0.569
1959	0.129	0.316	0.576
1960	0.140	0.342	0.605
1961	0.151	0.357	0.618
1962	0.155	0.360	0.630
1963	0.158	0.351	0.625
1964	0.154	0.342	0.615
1965	0.156	0.339	0.618
1966	0.157	0.333	0.612
1967	0.160	0.330	0.612
1968	0.164	0.328	0.607
1969	0.167	0.334	0.616
1970	0.171	0.354	0.641
1971	0.182	0.389	0.681
1972	0.186	0.429	0.730
1973	0.216	0.463	0.788
1974	0.304	0.573	0.953
1975	0.445	0.798	1.283
1976	0.580	0.984	1.599
1977	0.790	1.308	1.974
1978	0.905	1.466	2.184
1979	1.144	1.812	2.522

*Mcf and MMBtu prices are roughly comparable. On a MMBtu basis, the wellhead price would be slightly less.
Source: For wellhead price, Monthly Energy Review.

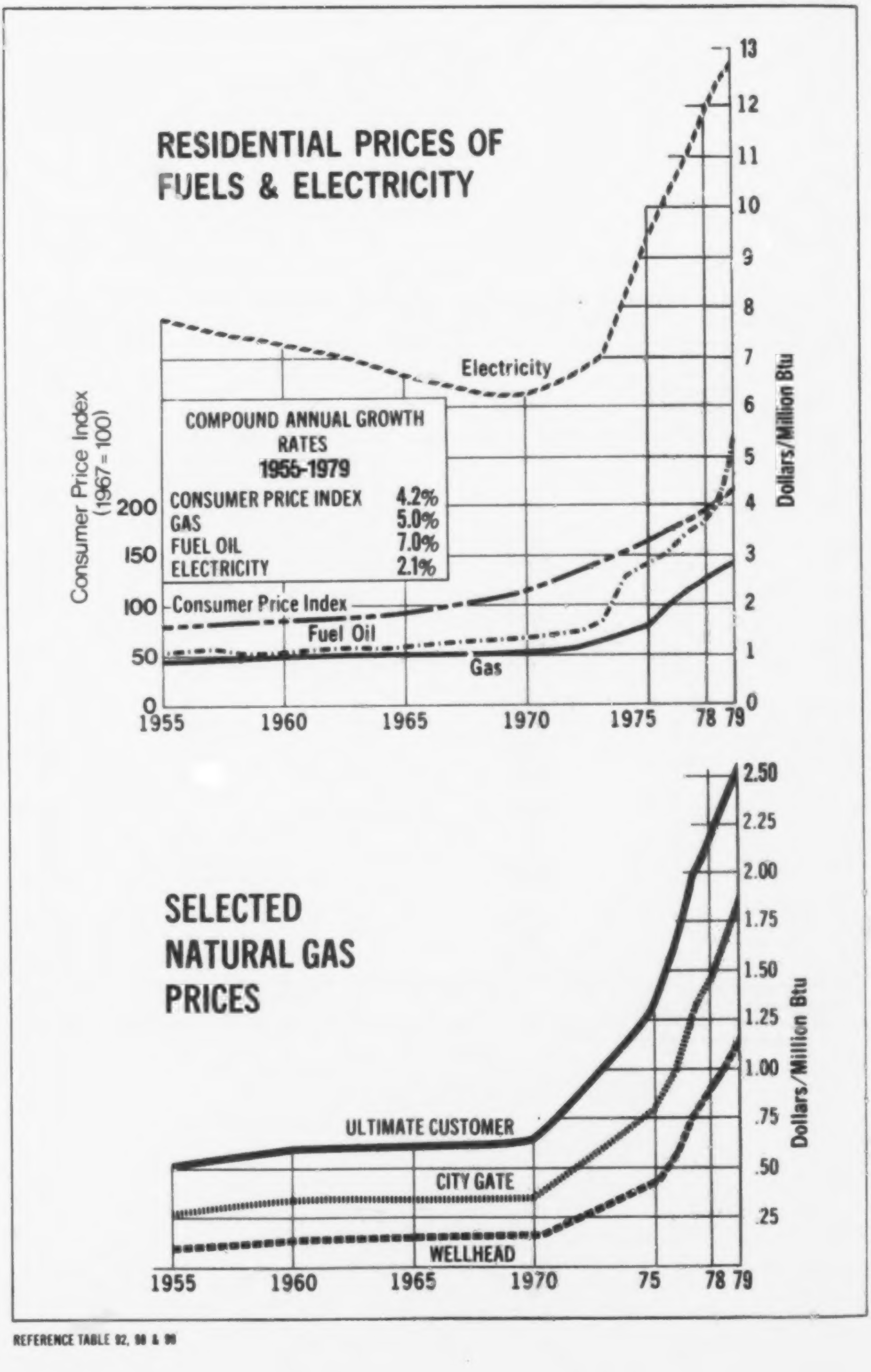
TABLE 99
AVERAGE RESIDENTIAL CONSUMPTION AND COSTS
1955-1979*

Year	Gas			Electric Price ($/MMBtu)	Number 2 Fuel Oil Price ($/MMBtu)
	Consumption (MM Btu/ Customer)	Annual Bill ($/Customer)	Price ($/MMBtu)		
1955	85.2	$ 76.38	$0.90	$ 7.77	$1.04
1956	90.5	82.10	0.91	7.65	1.10
1957	92.5	84.66	0.92	7.50	1.15
1958	97.7	92.32	0.94	7.44	1.08
1959	100.7	97.21	0.97	7.36	1.10
1960	104.8	104.46	1.00	7.24	1.08
1961	106.7	108.51	1.02	7.18	1.12
1962	110.9	112.98	1.02	7.06	1.13
1963	112.1	113.96	1.02	6.95	1.15
1964	115.3	116.09	1.01	6.77	1.12
1965	116.5	117.34	1.01	6.59	1.15
1966	118.8	119.38	1.00	6.45	1.18
1967	121.5	122.03	1.00	6.36	1.21
1968	124.1	124.48	1.00	6.21	1.25
1969	128.4	130.08	1.01	6.13	1.28
1970	129.2	136.69	1.06	6.15	1.33
1971	129.9	145.28	1.12	6.42	1.41
1972	130.4	154.56	1.19	6.71	1.42
1973	124.5	155.73	1.25	6.98	1.64
1974	119.6	169.82	1.42	8.29	2.60
1975	121.9	206.24	1.69	9.40	2.81
1976	121.3	240.48	1.98	10.11	3.01
1977	118.7	276.87	2.33	11.08	3.42
1978	121.0	307.40	2.53	11.81	3.66
1979	118.6	346.39	2.92	12.69	5.24

* Prices given are for total usage.

Sources: For electric price, *Edison Electric Institute Statistical Yearbook*. For oil price, Bureau of Labor Statistics, *Retail Prices and Indexes of Fuels and Utilities*.

CHART 17



REFERENCE TABLE 92, [illegible] & [illegible]

TABLE 100
AVERAGE ANNUAL RESIDENTIAL GAS BILLS, BY STATE, 1955-1979

($/Customer)

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	**$ 76**	**$104**	**$117**	**$137**	**$206**	**$307**	**$346**
New England	**68**	**103**	**128**	**162**	**274**	**377**	**398**
Connecticut	69	109	125	169	285	399	414
Maine	70	88	107	110	165	220	228
Massachusetts	69	106	132	163	276	374	401
New Hampshire	68	102	137	165	234	339	322
Rhode Island	59	91	117	146	265	370	380
Vermont	52	68	80	116	261	392	422
Middle Atlantic	**73**	**103**	**119**	**144**	**231**	**355**	**377**
New Jersey	68	102	124	150	229	348	361
New York	64	90	105	126	217	332	359
Pennsylvania	94	127	142	172	257	399	421
East North Central	**88**	**128**	**151**	**174**	**257**	**408**	**468**
Illinois	76	122	143	169	266	434	510
Indiana	75	101	128	168	220	348	411
Michigan	98	138	168	189	268	405	464
Ohio	102	140	157	172	259	421	465
Wisconsin	78	117	148	175	238	370	414
West North Central	**97**	**126**	**135**	**154**	**209**	**326**	**382**
Iowa	99	138	148	161	215	338	394
Kansas	80	90	93	114	145	239	270
Minnesota	113	161	176	190	255	378	451
Missouri	93	118	127	155	215	345	399
Nebraska	110	136	134	145	195	302	356
North Dakota	80	100	142	179	245	366	457
South Dakota	109	135	150	159	203	305	369
South Atlantic	**81**	**113**	**118**	**136**	**194**	**318**	**331**
Delaware	71	110	136	164	219	406	374
District of Columbia	95	122	129	147	230	362	381
Florida	59	54	68	87	107	154	173
Georgia	75	107	106	122	181	298	327
Maryland	86	125	133	158	225	362	369
North Carolina	78	110	124	144	188	321	342
South Carolina	72	98	105	122	151	241	270
Virginia	93	129	137	157	230	411	366
West Virginia	79	129	128	140	219	348	397
East South Central	**80**	**106**	**101**	**116**	**153**	**256**	**289**
Alabama	79	103	101	118	157	266	296
Kentucky	86	120	116	132	177	292	331
Mississippi	65	86	77	92	122	221	248
Tennessee	86	111	103	113	140	222	257
West South Central	**53**	**68**	**71**	**89**	**130**	**222**	**242**
Arkansas	61	81	85	103	128	190	210
Louisiana	46	56	59	72	108	198	219
Oklahoma	62	79	87	102	138	219	242
Texas	52	67	69	89	135	234	255
Mountain	**85**	**99**	**104**	**117**	**175**	**248**	**302**
Arizona	61	73	80	89	141	186	219
Colorado	95	100	103	111	171	259	336
Idaho	77	127	143	154	249	281	347
Montana	96	106	126	148	203	310	344
Nevada	103	130	134	148	204	231	285
New Mexico	77	99	96	109	173	242	288
Utah	98	127	128	148	201	288	324
Wyoming	99	102	106	117	160	287	374
Pacific	**67**	**84**	**94**	**103**	**174**	**183**	**232**
Alaska	*	*	341	282	328	362	377
California	66	82	92	97	166	169	218
Hawaii	*	92	102	120	232	238	283
Oregon	98	123	138	163	258	332	373
Washington	90	132	152	165	259	348	403

*Not available.

TABLE 101
AVERAGE RESIDENTIAL GAS PRICES BY CENSUS DIVISION HEATING SEASON—NOVEMBER THRU MARCH

($/MMBtu)

	1976-77	1977-78	1978-79	1979-80*
Total U.S.	2.10	2.35	2.62	3.28
NE	3.80	3.91	4.07	4.98
MA	2.59	3.02	3.35	3.94
ENC	2.02	2.25	2.44	3.14
WNC	1.72	1.97	2.42	2.75
SA	2.38	2.74	2.98	3.92
ESC	1.72	2.04	2.41	3.09
WSC	1.97	2.15	2.35	2.91
M	1.76	2.02	2.34	2.98
P	1.82	1.89	2.20	2.98

*Data used for 1980 was based on the "Quarterly Report of Gas Industry Operations."

TABLE 102
AVERAGE GAS CONSUMPTION BY HOUSEHEATING CUSTOMERS BY CENSUS DIVISION HEATING SEASON—NOVEMBER THRU MARCH

(MMBtu/Customer)

	1976-77	1977-78	1978-79	1979-80*
Total U.S.	97.5	94.7	93.8	83.3
NE	100.3	96.9	95.2	93.9
MA	125.9	120.9	111.7	107.4
ENC	130.8	125.8	128.0	112.9
WNC	119.2	118.2	113.5	105.3
SA	90.4	88.8	76.2	71.0
ESC	93.8	90.5	86.4	75.1
WSC	67.8	72.0	66.5	53.7
M	78.3	74.5	84.9	76.0
P	56.7	51.1	64.3	50.7

*Data used for 1980 was based on the "Quarterly Report of Gas Industry Operations."

TABLE 103
AVERAGE GAS BILL FOR HOUSEHEATING CUSTOMERS BY CENSUS DIVISION HEATING SEASON—NOVEMBER THRU MARCH

($/Customers)

	1976-77	1977-78	1978-79	1979-80*
Total U.S.	205	223	246	273
NE	381	379	387	468
MA	326	365	374	423
ENC	264	283	312	355
WNC	197	233	275	290
SA	215	243	227	278
ESC	161	185	208	232
WSC	134	155	156	156
M	138	150	199	226
P	103	97	141	151

*Data used for 1980 was based on the "Quarterly Report of Gas Industry Operations."

TABLE 104
GAS UTILITY INDUSTRY AVERAGE PRICES, FOR GAS USED FOR ELECTRIC GENERATION, BY STATE, 1972-1979

($/MMBtu)

Division and State	1972	1973	1974	1975	1976	1978	1979
United States	**$0.43**	**$0.37**	**$0.53**	**$0.86**	**$1.26**	**$1.78**	**$2.10**
New England	**0.53**	**0.60**	**1.40**	**1.13**	**1.52**	**2.41**	**2.65**
Connecticut	a	b	0.68	1.08	1.11	b	b
Maine	b	0.51	b	b	b	b	b
Massachusetts	0.53	0.60	1.40	1.21	1.58	1.88	2.69
New Hampshire	b	b	b	0.94	1.44	b	b
Rhode Island	0.51	0.69	1.63	1.58	b	2.04	2.49
Vermont	b	b	b	b	b	b	b
Middle Atlantic	**0.52**	**0.56**	**0.83**	**1.16**	**1.22**	**1.64**	**2.69**
New Jersey	0.49	0.50	0.67	1.07	1.17	1.83	2.84
New York	0.76	0.72	0.96	0.99	1.40	1.55	2.36
Pennsylvania	0.58	0.69	0.93	1.26	1.32	1.63	2.58
East North Central	**0.50**	**0.60**	**0.78**	**1.24**	**1.65**	**2.24**	**2.33**
Illinois	0.50	0.64	0.78	1.16	1.40	2.70	2.61
Indiana	0.49	0.81	0.68	0.97	1.54	2.40	2.09
Michigan	0.53	0.65	0.91	1.50	1.88	1.99	2.10
Ohio	0.60	0.57	0.73	1.20	1.02	1.31	2.24
Wisconsin	0.44	0.48	0.58	0.80	1.24	2.20	2.29
West North Central	**0.31**	**0.36**	**0.43**	**0.59**	**0.79**	**1.16**	**1.43**
Iowa	0.37	0.43	0.51	0.70	0.87	1.66	2.00
Kansas	0.27	0.31	0.38	0.53	0.78	1.16	1.45
Minnesota	0.34	0.41	0.50	0.64	0.84	1.69	1.80
Missouri	0.31	0.33	0.41	0.57	0.76	1.12	1.43
Nebraska	0.36	0.41	0.49	0.63	0.82	1.13	1.17
North Dakota	0.37	0.41	b	b	b	b	b
South Dakota	0.36	0.42	0.50	0.63	0.87	1.30	1.45
South Atlantic	**0.41**	**0.48**	**0.57**	**0.64**	**0.76**	**1.27**	**2.16**
Delaware	b	b	b	b	b	b	b
District of Columbia	b	b	b	b	b	b	b
Florida	0.42	0.50	0.54	0.58	0.68	1.15	2.15
Georgia	0.36	0.43	0.55	0.65	0.81	1.60	2.17
Maryland	b	b	b	b	b	b	b
North Carolina	0.53	0.60	0.93	b	b	b	2.82
South Carolina	0.53	0.58	0.93	b	b	b	2.92
Virginia	0.37	0.40	0.48	0.64	0.92	b	b
West Virginia	0.54	0.56	b	b	1.27	b	b
East South Central	**0.30**	**0.41**	**0.48**	**0.72**	**0.98**	**1.53**	**1.91**
Alabama	0.36	0.40	0.48	0.82	1.12	1.63	b
Kentucky	b	b	b	b	b	b	b
Mississippi	0.30	0.44	0.48	0.72	0.98	1.52	1.91
Tennessee	0.30	0.31	b	b	b	b	b
West South Central	**0.25**	**0.29**	**0.47**	**0.86**	**1.27**	**1.79**	**2.14**
Arkansas	0.31	0.37	0.43	0.66	0.80	1.20	1.13
Louisiana	0.23	0.26	0.31	0.70	1.06	1.59	2.03
Oklahoma	0.27	0.31	0.44	0.66	1.02	1.47	1.61
Texas	0.24	0.28	0.52	0.97	1.40	1.94	2.35
Mountain	**0.35**	**0.37**	**0.50**	**0.72**	**0.95**	**1.45**	**2.06**
Arizona	0.39	0.45	0.53	0.81	0.82	1.38	1.88
Colorado	0.30	0.34	0.43	0.60	0.79	1.31	2.00
Idaho	b	b	0.49	b	b	b	b
Montana	0.36	0.38	0.41	b	b	b	b
Nevada	0.45	0.50	0.68	1.07	1.42	1.62	2.36
New Mexico	0.27	0.31	0.45	0.63	0.87	1.55	1.97
Utah	0.31	0.31	0.40	0.58	0.92	1.26	1.53
Wyoming	b	b	b	b	b	b	b
Pacific	**0.38**	**0.41**	**0.59**	**1.03**	**1.53**	**2.14**	**2.40**
Alaska	0.40	0.40	0.39	0.51	0.66	0.88	0.85
California	0.38	0.42	0.59	1.05	1.56	2.18	2.44
Hawaii	b	b	b	b	b	b	b
Oregon	b	b	0.82	b	b	b	b
Washington	b	b	b	b	b	2.20	3.05

a. Not available.
b. No sales reported.

TABLE 105
GAS UTILITY INDUSTRY RESALE[a] PRICES BY STATE, 1970-1979

($/MMBtu)

Division and State	1970	1975	1976	1977	1978	1979
United States	**$0.37**	**$0.80**	**$0.98**	**$1.31**	**$1.47**	**$1.81**
New England	**0.62**	**1.41**	**1.64**	**1.86**	**1.92**	**2.25**
Connecticut	0.63	1.51	1.75	1.97	2.03	2.31
Maine	b	b	b	b	b	b
Massachusetts	0.61	1.35	1.57	1.81	1.87	2.23
New Hampshire	0.62	0.99	1.17	1.55	1.78	2.14
Rhode Island	0.59	1.59	1.81	1.95	1.94	2.26
Vermont	b	0.67	0.80	0.91	b	b
Middle Atlantic	**0.43**	**0.93**	**1.08**	**1.38**	**1.51**	**1.86**
New Jersey	0.44	0.99	1.15	1.41	1.47	1.78
New York	0.46	0.93	1.08	1.41	1.55	1.98
Pennsylvania	0.41	0.90	1.06	1.36	1.50	1.82
East North Central	**0.37**	**0.79**	**0.98**	**1.32**	**1.44**	**1.80**
Illinois	0.31	0.68	0.79	1.13	1.22	1.64
Indiana	0.37	0.72	0.89	1.22	1.27	1.72
Michigan	0.40	0.87	1.16	1.50	1.67	2.03
Ohio	0.39	0.84	1.02	1.35	1.48	1.78
Wisconsin	0.41	0.95	1.27	1.72	1.82	2.18
West North Central	**0.34**	**0.70**	**0.87**	**1.19**	**1.36**	**1.69**
Iowa	0.39	0.78	0.94	1.33	1.56	1.93
Kansas	0.26	0.53	0.72	0.95	1.04	1.29
Minnesota	0.37	0.75	0.91	1.24	1.47	1.91
Missouri	0.32	0.69	0.86	1.19	1.31	1.58
Nebraska	0.34	0.69	0.82	1.13	1.34	1.62
North Dakota	0.42	1.40	1.88	2.27	2.33	2.78
South Dakota	0.37	0.72	0.86	1.20	1.44	1.74
South Atlantic	**0.39**	**0.80**	**0.95**	**1.28**	**1.51**	**1.85**
Delaware	0.62	0.98	1.07	1.36	1.61	1.83
District of Columbia	b	b	b	b	b	b
Florida	0.38	0.66	0.83	1.07	1.25	1.62
Georgia	0.37	0.69	0.83	1.13	1.37	1.88
Maryland	0.45	1.05	1.16	1.55	1.74	1.89
North Carolina	0.24	0.81	0.96	1.28	1.54	1.89
South Carolina	0.45	0.68	0.82	1.12	1.35	1.81
Virginia	0.42	0.98	1.13	1.50	1.79	1.91
West Virginia	0.36	0.76	0.92	1.26	1.47	1.83
East South Central	**0.32**	**0.64**	**0.76**	**1.09**	**1.29**	**1.58**
Alabama	0.33	0.64	0.75	1.06	1.30	1.82
Kentucky	0.37	0.71	0.86	1.16	1.30	1.66
Mississippi	0.27	0.62	0.71	1.11	1.29	1.34
Tennessee	0.29	0.61	0.75	1.05	1.27	1.59
West South Central	**0.21**	**0.63**	**0.83**	**1.21**	**1.37**	**1.66**
Arkansas	0.30	0.58	0.68	0.95	1.05	1.29
Louisiana	0.22	0.62	0.72	1.12	1.30	1.70
Oklahoma	0.20	0.62	0.91	1.25	1.32	1.52
Texas	0.20	0.64	0.94	1.29	1.49	1.67
Mountain	**0.32**	**0.71**	**0.86**	**1.15**	**1.38**	**1.74**
Arizona	0.33	0.70	0.82	1.09	1.32	1.74
Colorado	0.26	0.58	0.74	1.09	1.37	1.46
Idaho	0.34	1.14	1.45	1.74	2.02	2.33
Montana	0.46	0.95	1.39	1.79	1.74	1.99
Nevada	0.51	1.28	1.57	1.95	2.17	2.81
New Mexico	0.20	0.48	0.67	0.96	1.27	1.59
Utah	0.20	0.42	0.49	0.68	0.81	1.20
Wyoming	0.23	0.97	1.18	1.53	1.73	2.17
Pacific	**0.34**	**1.10**	**1.50**	**1.79**	**1.95**	**2.39**
Alaska	b	b	b	b	b	b
California	0.37	0.85	1.10	1.42	1.54	2.08
Hawaii	b	b	b	b	b	b
Oregon	0.30	1.27	1.78	2.03	2.24	2.65
Washington	0.32	1.11	1.43	1.76	1.98	2.34

a. Resale prices approximate city-gate prices.
b. No sales reported.

TABLE 106
INDEXES OF WHOLESALE PRICES OF GAS, YEARLY AVERAGES, 1955-1979 AND MONTHLY AVERAGES, 1979

(1967 = 100)

Year and Month		All Gas	Utility Gas	Liquefied Petroleum Gas
1955		61.6	61.1	64.1
1956		65.9	63.5	80.1
1957	December*	72.8	71.7	78.3
1958		76.1	75.2	80.4
1959		82.9	83.2	82.6
1960		87.2	90.5	73.2
1961		88.8	94.9	58.7
1962		89.2	96.8	52.2
1963		91.8	97.5	69.6
1964		90.7	97.7	56.5
1965		92.8	97.8	69.2
1966		96.7	98.6	89.1
1967		100.0	100.0	100.0
1968		91.3	101.9	60.2
1969		93.1	103.0	63.7
1970		103.0	105.6	96.3
1971		108.0	112.2	95.7
1972		114.1	121.0	93.7
1973		126.7	131.3	113.2
1974		162.2	154.6	183.5
1975		216.7	215.3	221.0
1976		286.8	291.8	287.7
1977		387.8	412.3	367.9
1978		428.6	488.2	343.5
1979		544.4	637.6	406.9
	January	449.9	543.8	308.3
	February	458.1	558.3	306.3
	March	471.0	574.9	313.4
	April	477.1	580.2	321.8
	May	507.2	620.5	335.0
	June	522.3	629.4	360.9
	July	548.4	640.5	413.0
	August	572.4	663.2	439.9
	September	599.7	684.1	478.6
	October	619.1	701.4	502.3
	November	637.1	709.2	537.7
	December	670.5	746.2	566.1

*1957 yearly average not available.

Source: Bureau of Labor Statistics. *Wholesale Prices and Price Index*. Represents unofficial estimates of U.S. Bureau of Labor Statistics, based on Bureau of Mines wellhead prices of natural gas and average prices of L.P.G. between 1947 and 1956; and wellhead prices for natural gas by 20 major pipeline companies, and L.P.G. price quotations from 2 major producers subsequent to 1956.

SECTION XI
APPLIANCE AND HOUSING DATA

	1979	% Change 79/78
Manufacturer Shipments		
(Thousands of Units)		
Central Heating	2,084	+ 18.3
Ranges	1,670	− 7.2
Water Heaters	2,887	− 1.2
Clothes Dryers	757	0.0
New One-Family Houses Completed		
(Gas Heat)	512	+ 0.2

TABLE 107

MANUFACTURER SHIPMENTS OF GAS RANGES, WATER HEATERS AND CLOTHES DRYERS, 1955-1979[a]

(Thousands of units)

Year	Domestic Range Sales			Automatic Domestic Water Heater Sales			Automatic Gas Dryers
	Free-Standing[b]	Built-in[b]	Total	Natural Gas	L.P. Gas	Total	
1955	2,235	100	2,335	2,400	348	2,748	368[c]
1960	1,475	339	1,814	2,383	338	2,721	431
1961	1,484	346	1,830	2,448	284	2,732	412
1962	1,621	360	1,981	2,588	288	2,876	475
1963	1,714	358	2,072	2,346	251	2,597	535
1964	1,826	345	2,171	2,482	242	2,724	632
1965	1,976	291	2,267	2,497	240	2,737	710
1966	1,931	232	2,163	2,341	296	2,637	751
1967	1,954	169	2,123	2,246	309	2,555	829
1968	2,102	184	2,286	2,411	345	2,756	876
1969	2,282	189	2,471	2,386	356	2,742	905
1970	2,195	167	2,362	2,404	381	2,785	852
1971	2,363	186	2,549	2,645	443	3,088	847
1972	2,467	194	2,661	2,676	487	3,163	936
1973	2,312	169	2,481	2,568	512	3,080	926
1974	1,825	125	1,950	2,210	359	2,569	739
1975	1,493	125	1,618	2,388	257	2,645	672
1976	1,693	131	1,824	2,695	417	3,112	707
1977	1,615	131	1,746	d	d	d	736
1978	1,665[R]	129	1,794[R]	2,578[e]	343[e]	2,921[e]	757
1979	1,542	129	1,670	2,548[e]	339[e]	2,887[e]	757

a. Shows shipments by manufacturers, expanded from returns of reporting companies to represent industry-wide coverage. Shipments of appliances for L.P. gas users include those for use by customers obtaining such gas through utility mains, as well as bottled gas users.

b. Data for "Set-In" type ranges now included with "Free-Standing." Prior years have been added to provide comparability.

c. Includes combination washer-dryers.

d. Not available.

R—Revised.

e—Estimated.

Source: Gas Appliance Manufacturers Association. *Statistical Highlights*.

TABLE 108

MANUFACTURER SHIPMENTS OF GAS HEATING EQUIPMENT, 1955-1979[a]

(Thousands of units)

Year	Central Heaing Equipment				Floor and Wall Furnaces Total	Direct Heating Equipment Total
	Warm Air Furnaces	Conversion Burners	Boilers	Total		
1955	836	209	90	1,135	555	1,470
1960	900	132	153	1,185	453	1,211
1961	929	116	168	1,213	467	1,067
1962	1,009	104	175	1,288	515	1,161
1963	1,102	108	184	1,394	525	1,324
1964	1,186	101	199	1,486	555	1,190
1965	1,238	93	200	1,531	501	994
1966	1,213	93	186	1,492	515	1,034
1967	1,146	84	174	1,404	471	920
1968	1,428	79	187	1,694	555	974
1969	1,546	77	176	1,799	576	1,043
1970	1,471	66	164	1,701	545	781
1971	1,795	53	157	2,005	612	783
1972	2,066	40	156	2,262	762	708
1973	1,719	43	147	1,909	652	678
1974	1,476	89	123	1,688	409	488
1975	1,186	39	88	1,313	435	332
1976	1,554	26	113	1,693	523	306
1977	1,508	b	113	1,621	499	193
1978	1,636	b	126	1,762	532	175
1979	1,863	b	221	2,084	376	193

a. Shows shipments by manufacturers: expanded from returns of reporting companies to represent industry-wide coverage. Includes shipments for use by utility customers and bottled gas users.

b. Not available.

Source: Gas Appliance Manufacturers Association. *Statistical Highlights*.

TABLE 109
MANUFACTURER SHIPMENTS OF RESIDENTIAL GAS APPLIANCES, BY MONTH, 1979

(Thousands of units)

Month	Ranges		Automatic Water Heaters	Dryers[b]	Central Heating	
	Free-Standing[a]	Built-in			Warm Air Furnaces	Boilers
January	118	11	214	67	145	9
February	125	9	227	61	128	9
March	142	13	268	73	158	10
April	123	11	258	49	139	10
May	131	10	259	61	132	12
June	151	11	234	57	145	16
July	108	9	217	62	148	13
August	129	10	231	67	163	25
September	137	12	226	66	183	26
October	131	10	297	73	206	31
November	121	11	236	73	159	29
December	126	12	221	49	156	31
Total	1,542	129	2,888	758	1,862	221

a. Includes "set-in" type ranges.
b. Excludes combination washer-dryer units.
Source: Gas Appliance Manufacturers Association. *Statistical Highlights*.

TABLE 110
MANUFACTURER SHIPMENTS OF GAS RANGES, AND VALUE, BY TYPE OF RANGE, 1979

Type of Range	Units (Thousands)	Percentages of Total
Apartment Ranges	187.2	10.4
Standard Ranges[a]	1,352.3	75.2
Combination and Heater Ranges[b]	3.2	0.2
Total Free Standing Ranges[c]	1,542.7	85.8
High Oven Ranges	127.4	7.1
Total Free Standing and High Oven Ranges	1,670.1	92.9
Built-In Units	128.5	7.1
Total[a]	1,798.6	100.0

a. The above figures exclude gas ranges used in travel trailers and recreational vehicles.
b. Includes bungalow ranges.
c. Includes "set-in" type ranges.
Source: Gas Appliance Manufacturers Association. *Residential Gas Ranges*.

TABLE 111
MANUFACTURER SHIPMENTS OF GAS WATER HEATERS, BY SIZE, 1979

Size in Gallons	Total Shipments (Thousands of Units)	Percentage of Total Shipments
Less than 30	89.3	3.1
30-39.9	1,075.7	37.3
40-47.4	1,316.4	45.6
47.5 and over	405.8	14.0
Total	2,887.3	100.0

Source: Gas Appliance Manufacturers Association. *Residential Gas-Fired Automatic Storage Water Heaters*.

TABLE 112
MANUFACTURER SHIPMENTS OF GAS FURNACES, BY TYPE AND SIZE, 1979

Type	Percentage[a] of Total	Size by Btu Output	Percentage[b] of Total
Gravity	0.1	Less than 50,000	8.4
		50,000-74,999	26.0
Forced Warm Air	99.9	75,000-89,999	29.8
Up-flow	73.0	90,000-134,999	32.2
Counter Flow	15.4	135,000-179,999	3.4
Horizontal	11.5	180,000 and over	0.3
Total	100.0	Total	100.0

a. Based on shipments of 1,862,600 gas fired furnaces.
b. Excludes gravity furnaces. Based on shipments of 1,861,200 gas fired forced warm air furnaces.
Source: Gas Appliance Manufacturers Association. *Gas-Fired Warm Air Furnaces*.

TABLE 113
MANUFACTURER SHIPMENTS OF GAS-FIRED BOILERS, BY TYPE AND SIZE, 1979

(Percentages)

Btu Output	Steam	Hot Water	Total
Less than 50,000	0.0	0.0	0.0
50,000- 74,999	1.8	13.7	11.1
75,000- 99,999	15.2	22.6	21.0
100,000-124,999	31.5	31.1	31.2
125,000-149,999	16.2	13.2	13.8
150,000-199,999	12.9	9.2	9.9
200,000-249,999	7.7	5.2	5.8
250,000-449,999	7.2	2.8	3.8
450,000-949,999	4.2	1.4	2.0
950,000 and over	3.3	0.8	1.4
Total*	100.0	100.0	100.0

*Based on shipments of 46,860 steam boilers and 174,440 hot water boilers, for a total of 221,300 units.
Source: Gas Appliance Manufacturers Association. *Gas-Fired Boilers*.

TABLE 114

GAS CONSUMPTION BY RESIDENTIAL APPLIANCES, 1975

(Average Consumption, Excluding Extremes)

(Therms per year)

	Residential Customers	House Range	Apt. Range	Water Heater	Clothes Dryer (gas pilot)	Clothes Dryer (elec. pilot)	Incinerator	Gas Light	Air Conditioner Consumption Per Ton	Gas Grill	Gas Heat All Types
United States	28,778,360	105	83	325	73	48	151	184	273	27	1,069
New England	1,068,258	101	70	284	86	74	158	178	237	21	1,372
Middle Atlantic	6,263,484	99	77	336	67	50	147	188	227	22	1,279
East North Central	7,553,917	100	82	341	74	44	155	183	196	27	1,350
West North Central	2,834,033	90	70	323	82	52	154	171	269	23	1,218
South Atlantic	2,790,315	96	84	301	65	39	138	181	334	27	902
East South Central	912,697	118	104	291	72	51	*	165	258	42	973
West South Central	3,166,276	118	95	299	69	38	*	191	498	40	731
Mountain	999,675	103	84	259	76	45	138	185	*	28	1,162
Pacific	3,189,705	108	92	357	82	56	*	188	257	*	755

*Not available.

Note: A total of 152 companies with a total of 28,778,360 residential customers provided data for this summary. This represents 70 percent of the 41,336,500 residential gas customers in the United States (1975).

TABLE 115
NUMBER OF OCCUPIED HOUSING UNITS, BY TYPE OF HEATING FUEL AND BY CENSUS REGION, 1970-1977

(Thousands of Occupied Units[a])

Year and Region	Total	Gas	Electricity	Oil[b]	Other[c]/None
1970					
United States	**63,445**	**35,014**	**4,876**	**16,474**	**7,083**
Northeast	15,483	5,741	474	8,414	850
North Central	17,535	11,708	546	3,431	1,852
South	19,257	9,626	2,544	3,645	3,443
West	11,169	7,939	1,312	984	936
1973					
United States	**69,337**	**38,461**	**7,213**	**17,235**	**6,429**
Northeast	16,152	5,850	596	9,249	457
North Central	18,742	12,810	901	3,304	1,727
South	21,806	10,783	3,897	3,761	3,366
West	12,638	9,018	1,818	921	880
1974					
United States	**70,831**	**39,481**	**8,412**	**16,827**	**6,111**
Northeast	16,282	5,952	709	9,215	405
North Central	18,993	13,240	1,041	3,148	1,564
South	22,489	11,069	4,584	3,567	3,268
West	13,067	9,220	2,079	897	871
1975					
United States	**72,523**	**40,933**	**9,173**	**16,299**	**6,117**
Northeast	16,508	6,446	802	8,875	386
North Central	19,393	13,666	1,154	3,027	1,546
South	23,105	11,352	4,965	3,508	3,280
West	13,518	9,469	2,253	889	907
1976					
United States	**74,005**	**41,219**	**10,151**	**16,451**	**6,184**
Northeast	16,544	6,140	846	9,161	397
North Central	19,722	13,803	1,366	3,004	1,549
South	23,742	11,449	5,498	3,488	3,307
West	13,998	9,826	2,441	798	933
1977					
United States	**75,280**	**41,543**	**11,146**	**16,060**	**6,531**
Northeast	16,637	6,151	958	9,103	425
North Central	19,855	13,893	1,506	2,843	1,613
South	24,379	11,577	6,033	3,335	3,434
West	14,407	9,922	2,649	778	1,058

a. Units include both single-family and multifamily.
b. Oil includes kerosene.
c. Other includes LP gas, coal and wood.
Sources: For 1970. U.S Bureau of the Census, Census of Housing; 1970. *Detailed Housing Characteristics*.
For 1973-1977 U.S. Bureau of the Census. Current Housing Reports—Series H-150. *Annual Housing Survey*. Part A.

TABLE 116
NEW ONE-FAMILY HOUSES COMPLETED, BY TYPE OF HEATING FUEL AND BY CENSUS REGION, 1971-1979[a]

(Thousands of Units)

Year and Region	Total	Gas	Electricity	Oil	Other/None
1971					
United States	1,014	605	313	83	15
Northeast	134	56	34	42	b
North Central	208	162	26	19	b
South	467	227	209	21	11
West	204	158	44	b	b
1972					
United States	1,143	621	416	93	13
Northeast	149	55	44	48	b
North Central	231	170	38	22	b
South	524	222	272	22	8
West	239	173	63	b	b
1973					
United States	1,197	560	497	125	16
Northeast	156	53	44	55	5
North Central	262	160	66	34	b
South	526	172	312	35	7
West	253	175	74	b	b
1974					
United States	940	385	458	85	11
Northeast	132	38	51	42	b
North Central	220	112	79	26	3
South	397	109	266	16	5
West	191	126	63	b	b
1975					
United States	875	347	429	82	18
Northeast	114	27	37	47	3
North Central	218	107	83	20	8
South	362	105	239	14	4
West	182	107	71	b	3
1976					
United States	1,034	407	499	110	19
Northeast	121	18	38	62	4
North Central	271	130	109	26	6
South	410	120	260	22	8
West	232	139	91	b	b
1977					
United States	1,258	476	635	120	28
Northeast	135	22	42	67	5
North Central	300	138	121	30	11
South	512	139	341	23	8
West	311	176	130	b	4
1978					
United States	1,369	511	710	109	40
Northeast	141	23	48	60	11
North Central	300	149	107	32	11
South	571	153	392	16	9
West	357	186	162	b	9
1979					
United States	1,301	512	662	86	41
Northeast	135	32	47	48	7
North Central	294	162	96	22	14
South	535	147	365	14	9
West	337	170	154	b	12

a. Includes only privately-owned housing units.
b. Withheld because estimate did not meet Bureau of the Census publication standards.
Source: U.S. Bureau of the Census, Construction Reports—Series C25, *Characteristics of New Housing*.

TABLE 117

UNITS IN NEW MULTIFAMILY BUILDINGS COMPLETED, BY TYPE OF HEATING FUEL AND BY CENSUS REGION, 1971-1979

(Thousands of Units[a])

Year and Region	Total	Gas	Electricity	Oil	Other/None
1971					
United States	692	b	b	b	b
Northeast	91	b	b	b	b
North Central	140	b	b	b	b
South	260	b	b	b	b
West	201	b	b	b	b
1972					
United States	828	b	b	b	b
Northeast	132	b	b	b	b
North Central	174	b	b	b	b
South	304	b	b	b	b
West	218	b	b	b	b
1973					
United States	903	c	c	c	c
Northeast	138	c	c	c	c
North Central	180	c	c	c	c
South	380	c	c	c	c
West	205	c	c	c	c
1974					
United States	788	279	472	30	7
Northeast	99	28	44	22	6
North Central	157	93	62	1	1
South	359	76	275	7	c
West	173	81	91	c	c
1975					
United States	442	145	260	30	7
Northeast	72	17	25	24	6
North Central	96	48	47	c	1
South	170	31	133	5	c
West	105	48	56	c	c
1976					
United States	343	113	202	24	3
Northeast	50	11	21	16	2
North Central	84	39	44	1	c
South	103	19	78	6	1
West	106	45	60	c	c
1977					
United States	399	115	261	18	4
Northeast	41	9	20	10	2
North Central	99	39	54	6	c
South	125	16	106	3	c
West	133	51	81	c	1
1978					
United States	498	131	339	24	5
Northeast	41	9	13	18	c
North Central	117	44	70	2	c
South	181	16	161	3	1
West	160	61	95	c	4
1979					
United States	570	150	386	27	6
Northeast	53	11	21	21	c
North Central	121	50	69	2	1
South	227	22	200	4	2
West	169	68	97	c	4

a. Includes only privately-owned housing units.
b. Not available.
c. Withheld because estimate did not meet Bureau of the Census publication standards.
Source: U.S. Bureau of the Census, Construction Reports—Series C25, *Characteristics of New Housing*

APPLIANCE AND HOUSING DATA

TABLE 118
NUMBER OF OCCUPIED HOUSING UNITS, BY TYPE OF COOKING FUEL AND BY CENSUS REGION, 1970-1977

(Thousands of Occupied Units[a])

Year and Region	Total	Gas	Electricity	Oil[b]	Other[c]/None
1970					
United States	**63,445**	**31,244**	**25,769**	**303**	**6,130**
Northeast	15,483	9,216	4,897	150	1,217
North Central	17,535	8,956	6,833	45	1,703
South	19,257	7,591	8,904	84	2,679
West	11,169	5,482	5,135	24	531
1973					
United States	**69,337**	**31,924**	**31,013**	**87**	**6,313**
Northeast	16,152	9,393	5,503	24	1,232
North Central	18,742	8,940	8,011	23	1,768
South	21,807	7,942	11,065	29	2,771
West	12,636	5,648	6,434	11	543
1974					
United States	**70,831**	**31,908**	**32,720**	**82**	**6,120**
Northeast	16,281	9,211	5,747	46	1,277
North Central	18,993	8,908	8,423	14	1,648
South	22,489	7,985	11,797	19	2,688
West	13,067	5,803	6,754	4	506
1975					
United States	**72,523**	**32,493**	**33,944**	**76**	**6,011**
Northeast	16,508	9,244	5,973	27	1,264
North Central	19,393	9,051	8,699	16	1,627
South	23,105	8,229	12,224	31	2,621
West	13,518	5,968	7,048	3	499
1976					
United States	**74,003**	**32,299**	**35,669**	**44**	**5,991**
Northeast	16,545	9,086	6,178	14	1,267
North Central	19,722	8,978	9,165	7	1,572
South	23,741	8,179	12,897	22	2,643
West	13,996	6,057	7,429	1	509
1977					
United States	**75,280**	**32,207**	**37,042**	**45**	**5,986**
Northeast	16,635	9,096	6,280	17	1,242
North Central	19,857	8,857	9,426	14	1,560
South	24,379	8,146	13,563	11	2,659
West	14,408	6,107	7,773	2	526

a. Units include both single-family and multifamily.

b. Oil includes kerosene.

c. Other includes LP gas, coal and wood.

Sources: For 1970. U.S Bureau of the Census, Census of Housing; 1970. *Detailed Housing Characteristics*. For 1973-1977 U.S. Bureau of the Census, Current Housing Reports—Series H-150, *Annual Housing Survey*, Part A.

TABLE 119
NUMBER OF OCCUPIED HOUSING UNITS, BY TYPE OF FUEL USED FOR WATER HEATING AND CLOTHES DRYING, AND BY CENSUS REGION, 1970.

(Thousands of Occupied Units[a])

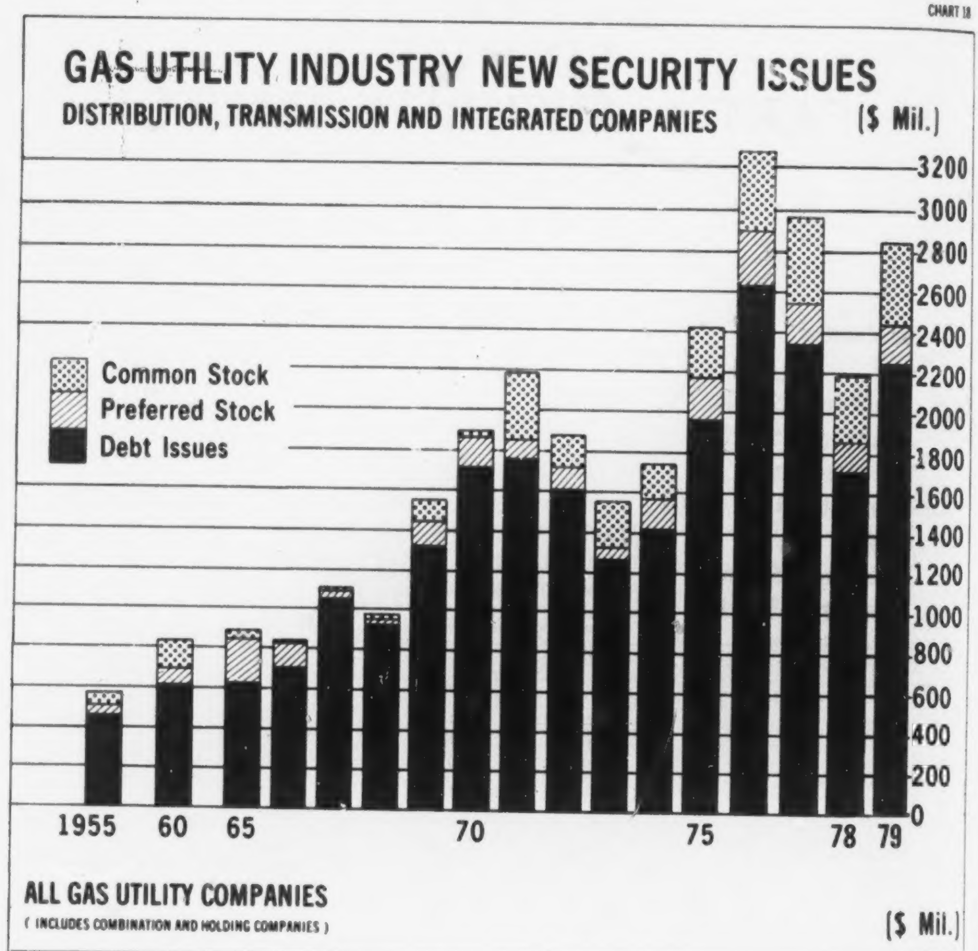
Use and Region	Total	Gas	Electricity	Oil[b]	Other[c]/None
Water Heating					
United States	63,445	34,959	16,103	6,201	6,184
Northeast	15,483	6,860	2,314	5,364	942
North Central	17,535	11,574	4,034	247	1,682
South	19,257	8,826	6,921	507	3,004
West	11,169	7,699	2,834	83	556
Clothes Drying					
United States	63,445	7,840	18,637	d	30,970[e]
Northeast	15,483	1,830	4,002	d	9,648[e]
North Central	17,535	3,547	5,708	d	8,282[e]
South	19,257	1,175	5,173	d	12,910[e]
West	11,169	1,288	3,754	d	6,130[e]

a. Units include both single-family and multifamily.
b. Oil includes kerosene.
c. Other includes LP gas, coal and wood.
d. Not applicable.
e. Occupied housing units with no clothes dryers.
Source: For 1970, U.S. Bureau of the Census, Census of Housing: 1970, *Detailed Housing Characteristics.*

SECTION XII
FINANCE
PART 1. SECURITY ISSUES

	1979	% Change 79/78
No. of Issues		
Total	322	− 8.3
Common Stock	162	− 0.6
Preferred Stock	30	−37.5
Debt Issues	130	− 7.1
Amount ($000)		
Total	7,959,649	+ 0.3
Common Stock	1,860,954	−14.1
Preferred Stock	773,692	−26.7
Debt Issues	5,325,003	+13.0

CHART 18



GAS UTILITY INDUSTRY NEW SECURITY ISSUES

DISTRIBUTION, TRANSMISSION AND INTEGRATED COMPANIES

ALL GAS UTILITY COMPANIES

(INCLUDES COMBINATION AND HOLDING COMPANIES)

REFERENCE: TABLE 120

TABLE 120
GAS UTILITY INDUSTRY SECURITY ISSUES
OF DISTRIBUTION, TRANSMISSION, GAS HOLDING,[a] AND COMBINATION GAS AND ELECTRIC COMPANIES
1955–1979[b]

							Debt Issues							
	Total		Common Stock		Preferred Stock		Total		Bonds		Debentures		Notes	
Year	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)
1955	143	$1,412,753	35	$ 274,153	23	$ 192,043	85	$ 946,557	60	$ 734,425	15	$146,693	10	$ 65,439
1960	193	1,859,043	67	240,509	19	202,267	107	1,416,267	79	1,098,250	20	276,323	8	41,694
1965	176	1,728,807	60	99,444	28	324,790	88	1,304,573	61	854,010	18	410,900	9	39,663
1966	164	1,966,903	56	109,905	22	200,906	86	1,656,092	70	1,375,390	8	222,412	8	58,290
1967	187	2,930,328	50	59,205	23	265,847	114	2,605,276	82	1,997,644	21	565,274	11	42,358
1968	167	2,760,665	52	143,110	16	258,254	99	2,359,301	70	1,540,501	18	588,750	11	230,050
1969	204	3,443,576	78	457,935	18	267,762	108	2,717,879	64	1,664,945	26	758,569	18	294,365
1970	280	6,030,084	68	745,638	33	620,674	179	4,663,772	125	3,502,000	27	897,500	27	264,272
1971	330	7,012,900	96	1,283,271	47	965,439	187	4,764,190	103	3,193,366	26	927,500	58	643,324
1972	280	6,832,495	83	1,306,307	39	1,185,808	116	4,340,380	87	3,032,306	13	554,500	58	753,574
1973	286	6,302,378	96	1,408,410	39	1,073,959	151	3,820,009	82	2,466,690	6	260,000	63	1,093,319
1974	286	7,889,359	102	1,144,544	39	1,128,175	145	5,616,640	78	3,950,281	17	739,519	50	926,840
1975	353	8,312,575	141	1,973,385	42	1,059,396	170	5,279,794	101	3,661,125	19	911,571	50	707,098
1976	336	9,104,026	152	2,472,747	41	1,108,268	143	5,523,011	75	2,899,279	16	860,500	52	1,763,232
1977	336	8,244,438	167	1,864,904	40	1,106,130	129	5,273,404	70	2,956,200	10	461,500	49	1,855,704
1978	351	7,933,090	163	2,167,077	48	1,055,458	140	4,710,555	73	3,189,650	12	306,516	55	1,214,389
1979	322	7,959,649	162	1,860,954	30	773,692	130	5,325,003	69	2,908,350	11	895,000	50	1,521,653

[a] Gas holding companies used in this section are as follows: Columbia Gas Systems, Inc., New England Gas and Electric Association, Northern States Power Company, Pennsylvania and Southern Gas Company, Public Service Company of Colorado.

[b] All new and refunding security issues, except sales by subsidiaries to parent companies and direct exchanges, for which data were obtainable have been included. Short term notes for less than one year are omitted. Bonds, debentures, and notes are included in principal amounts; preferred stocks at stated or liquidating values; and common stocks at offerings prices.

TABLE 121
GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF SECURITY ISSUES OF DISTRIBUTION, TRANSMISSION, GAS HOLDING,[a] AND COMBINATION GAS AND ELECTRIC COMPANIES
1955–1979[b]

Year	Preferred Stock				Bonds				Debentures				Sample Amount (000)		
	Cost		Yield		Cost		Yield		Cost		Yield				
	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Preferred Stock	Bonds	Debentures
1955	4.69	4.56	4.59	4.46	3.55	3.48	3.53	3.46	3.98	3.74	3.95	3.70	$ 188,868	$ 676,975	$136,593
1960	5.61	5.51	5.50	5.45	5.22	5.03	5.17	4.98	5.22	5.09	5.14	5.03	192,767	1,017,700	266,602
1965	4.71	4.78	4.69	4.76	4.77	4.74	4.75	4.71	4.84	4.87	4.81	4.82	268,200	806,460	403,700
1966	5.60	5.61	5.59	5.57	5.80	5.80	5.74	5.73	5.94	5.91	5.86	5.83	89,130	1,251,935	150,000
1967	6.15	6.18	6.10	6.11	6.17	6.18	6.11	6.10	6.43	6.43	6.32	6.35	224,370	1,882,995	507,500
1968	6.69	6.63	6.62	6.55	6.80	6.82	6.73	6.80	7.13	7.19	7.04	7.10	133,000	1,448,801	442,000
1969	8.08	8.04	7.95	7.93	7.66	7.61	8.52	8.22	8.39	8.47	8.52	8.22	226,888	1,664,945	758,569
1970	9.25	9.27	9.16	9.18	9.04	9.08	9.06	9.26	9.16	9.36	9.06	9.26	570,674	3,492,500	897,000
1971	8.16	7.98	8.05	7.87	8.06	7.90	7.97	7.81	8.16	8.14	8.07	8.05	922,312	3,098,589	912,500
1972	7.70	7.65	7.62	7.56	7.60	7.56	7.53	7.50	7.53	7.44	7.46	7.38	1,074,539	2,631,306	455,500
1973	7.72	7.61	7.66	7.54	7.98	7.93	7.91	7.87	7.80	7.77	7.73	7.71	1,051,459	2,137,890	200,000
1974	9.96	9.83	9.82	9.68	9.76	9.84	9.67	9.75	9.48	9.34	9.40	9.25	996,175	3,222,000	535,000
1975	10.87	10.89	10.55	10.53	10.10	10.06	10.00	9.97	10.28	10.31	10.17	10.20	1,028,515	3,346,050	801,000
1976	10.15	9.49	9.16	9.24	8.96	9.01	8.87	8.93	8.88	8.87	8.81	8.80	1,050,268	2,826,590	735,000
1977	8.50	8.45	8.34	8.31	8.51	8.50	8.45	8.44	8.74	8.36	8.63	8.29	973,512	2,682,500	265,000
1978	8.84	8.90	8.75	8.68	8.40	8.18	8.38	8.01	9.26	9.02	9.12	8.89	806,206	2,669,900	150,000
1979	9.05	9.32	9.03	9.23	11.14	10.55	11.12	10.48	10.81	11.12	10.65	11.04	705,500	2,348,300	645,000

a. Refer to Table 120 for name of gas holding companies.
b. Includes only those preferred stocks, bonds, and debentures shown in Table 120 for which necessary cost and yield data were available.

Definitions: "Cost" refers to the expenses incurred by a company relative to new security issues over the life of debt issues and fixed dividends (if applicable) on preferred stocks. It includes underwriter fees, plus discount expenses less premiums.

"Yield" is the rate of return on investment by a buyer of these debt issues and fixed dividends (if applicable) expected on preferred stock. It includes underwtier fees, plus premium expenses less discounts.

TABLE 122
GAS UTILITY INDUSTRY LONG TERM DEBT ISSUES, BY MOODY'S BOND RATING CATEGORY, 1979

	Issues		Cost		Yield	
Rating	Number	Sample Amount (000)	Average	Weighted Average	Average	Weighted Average
Aaa	*	*	0.00	0.00	0.00	0.00
Aa	10	$765,000	10.44	10.85	10.36	10.49
A	13	740,000	11.26	11.45	11.16	11.35
Baa	3	200,000	11.35	11.43	11.22	11.30
Ba	*	*	0.00	0.00	0.00	0.00

*No issues used in this sample.

TABLE 123

GAS UTILITY INDUSTRY COMMON STOCK ISSUES, BY TYPE OF COMPANY 1973-1979[a]

Type of Company	1973	1974	1975	1976	1977	1978	1979
Total							
Amount (000)	$1,408,410	$1,144,544	$1,973,385	$2,472,747	$1,864,904	$2,167,077	$1,860,954
No. of Issues	96	102	141	152	167	163	162
Distribution							
Amount (000)	$55,126	$8,111	$65,016	$71,185	$94,917	$77,052	$53,295
No. of Issues	15	10	14	9	13	16	9
Transmission							
Amount (000)	$138,657	$106,671	$139,824	$251,020	$107,387	$80,214	$323,125
No. of Issues	10	7	4	13	9	13	15
Integrated							
Amount (000)	$38,005	$72,594	$45,711	$63,363	$42,398	$182,100	$43,012
No. of Issues	15	18	19	13	16	19	15
Combination Utilities							
Amount (000)	$1,042,587	$821,587	$1,312,958	$1,790,464	$1,425,839	$1,701,314	$1,385,842
No. of Issues	52	60	87	103	115	106	120
Gas Holding[b]							
Amount (000)	$134,035	$135,581	$409,876	$296,715	$194,363	$126,397	$55,680
No. of Issues	4	7	17	14	14	9	3

a. See Footnote "b". Table 120 for description of securities included and the derivation of stated amounts.

b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

TABLE 124

GAS UTILITY INDUSTRY INDEXES OF COMMON STOCK PRICES, DIVIDENDS, YIELDS, AND EARNINGS BY TYPE OF COMPANY, 1974-1979

Year	1974		1975		1976		1977		1978		1979	
Type of Company Week	Jun 28	Dec 27	Jun 27	Dec 26	Jun 25	Dec 31	Jun 24	Dec 30	Jun 30	Dec 29	Jun 29	Dec 27
Natural Gas Industry												
a) Market Price ($ Per Share)	48.24	50.50	63.04	58.15	70.12	82.05	85.74	80.80	77.72	72.47	87.10	104.10
b) Dividend ($ Per Share)	3.87	4.01	4.08	4.25	4.37	4.55	4.73	4.96	5.08	5.43	5.56	5.97
c) Yield (Percent)	8.02	7.94	6.47	7.31	6.23	5.55	5.52	6.14	6.54	7.49	6.38	5.73
d) Earnings ($ Per Share)*	8.08	8.64	8.68	9.04	10.01	10.55	10.93	11.30	11.52	11.89	11.76	12.22
Distribution Companies												
a) Market Price ($ Per Share)	33.70	29.94	43.25	38.29	43.98	51.80	53.71	51.02	48.46	45.97	54.04	53.83
b) Dividend ($ Per Share)	3.30	3.34	3.41	3.48	3.69	3.70	3.87	3.93	4.07	4.18	4.34	4.44
c) Yield (Percent)	9.79	11.16	7.88	9.09	8.39	7.14	7.21	7.70	8.40	9.09	8.03	8.25
d) Earnings ($ Per Share)*	4.16	4.48	5.14	4.72	4.98	5.52	6.30	5.99	7.43	7.79	7.23	8.00
Transmission Companies												
a) Market Price ($ Per Share)	58.86	62.84	77.46	72.85	94.77	105.00	106.63	98.94	94.09	87.09	109.73	134.16
b) Dividend ($ Per Share)	4.32	4.49	4.56	4.78	4.93	5.12	5.28	5.64	5.74	6.25	6.40	7.00
c) Yield (Percent)	7.34	7.15	5.89	6.56	5.20	4.88	4.95	5.70	6.10	7.18	5.83	5.22
d) Earnings ($ Per Share)*	10.56	11.07	10.53	11.90	13.77	13.59	13.85	14.48	14.36	14.37	14.74	15.30

*Earnings are for twelve month periods.
Source: Moody's Investors Service.

TABLE 125

GAS UTILITY INDUSTRY PREFERRED STOCK ISSUES, BY TYPE OF COMPANY

1973-1979[a]

Type of Company	1973	1974	1975	1976	1977	1978	1979
Total							
Amount (000)	$1,073,959	$1,128,175	$1,059,396	$1,108,268	$1,106,130	$1,055,458	$773,692
No. of Issues	39	39	42	41	40	48	30
Distribution							
Amount (000)	$19,000	$24,000	$15,000	$78,180	$57,465	$116,533	$92,575
No. of Issues	4	2	2	5	3	8	5
Transmission							
Amount (000)	$70,000	$140,000	$110,000	$152,000	$74,618	$3,000	$70,117
No. of Issues	2	1	2	5	5	1	3
Integrated							
Amount (000)	$0	$0	$94,075	$54,500	$53,250	$22,252	$33,500
No. of Issues	0	0	5	4	4	2	2
Combination Utilities							
Amount (000)	$899,959	$804,500	$737,250	$738,588	$880,797	$913,673	$577,500
No. of Issues	31	31	31	24	27	37	20
Gas Holding[b]							
Amount (000)	$85,000	$159,675	$103,071	$85,000	$40,000	$0	$0
No. of Issues	2	5	2	3	1	0	0

a. See Footnote "b", Table 120 for description of securities included and the derivation of stated amounts.

b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

TABLE 126

GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF PREFERRED STOCK ISSUES

1973-1979[a]

	1973		1974		1975		1976		1977		1978		1979	
	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield
Total														
Average	7.72	7.66	9.96	9.82	10.87	10.55	10.15	9.16	8.50	8.34	8.84	8.75	9.05	9.03
Weighted Average	7.61	7.54	9.83	9.68	10.89	10.53	9.49	9.24	8.45	8.31	8.90	8.68	9.32	9.23
Sample Amount (000)		$1,051,459		$996,175		$1,028,515		$1,050,268		$973,512		$806,206		$705,500
Distribution														
Average	8.08	8.05	8.92	8.80	10.32	10.10	9.88	9.50	8.70	8.51	8.63	8.54	9.34	9.30
Weighted Average	8.05	8.01	8.92	8.80	10.42	10.13	9.88	9.50	8.47	8.36	8.49	8.41	9.34	9.30
Sample Amount (000)		$13,000		$20,000		$15,000		$20,180		$57,465		$83,533		$70,000
Transmission														
Average	8.59	8.38	8.57	8.52	11.58	11.10	9.68	9.35	7.49	7.45	9.50	9.40	8.38	8.38
Weighted Average	8.64	8.42	8.57	8.52	11.61	11.14	10.02	9.65	7.49	7.45	9.50	9.40	8.43	8.43
Sample Amount (000)		$70,000		$40,000		$110,000		$152,000		$30,000		$3,000		$70,000
Integrated														
Average	0.00	0.00	0.00	0.00	10.82	10.44	8.92	8.79	8.69	8.55	8.70	8.62	9.50	9.50
Weighted Average	0.00	0.00	0.00	0.00	10.63	10.33	8.65	8.63	8.40	8.14	8.70	8.62	9.50	9.50
Sample Amount (000)		$0		$0		$94,075		$54,500		$53,250		$12,000		$8,500
Combination Utilites														
Average	7.65	7.59	10.04	9.89	10.87	10.55	10.56	9.17	8.47	8.31	8.52	8.45	8.99	8.93
Weighted Average	7.53	7.47	9.79	9.66	10.81	10.45	9.45	9.21	8.47	8.33	8.95	8.72	9.42	9.32
Sample Amount (000)		$883,459		$776,500		$707,250		$738,588		$792,797		$707,673		$557,000
Gas Holding[b]														
Average	7.53	7.47	10.04	10.44	10.95	10.73	9.43	9.13	8.80	8.50	0.00	0.00	0.00	0.00
Weighted Average	7.53	7.46	9.85	10.22	10.95	10.72	9.31	9.01	8.80	8.50	0.00	0.00	0.00	0.00
Sample Amount (000)		$85,000		$159,675		$102,190		$85,000		$40,000		$0		$0

a. Includes only those issues in Table 125 for which necessary cost and yield data were available.

b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

Definitions: "Cost" refers to the expenses incurred by a company. It includes dividends, underwriter fees, plus discount expenses less premiums.
"Yield" is the rate of return on investment by a buyer.

TABLE 127
GAS UTILITY INDUSTRY BOND ISSUES, BY TYPE OF COMPANY
1973-1979[a]

Type of Company	1973	1974	1975	1976	1977	1978	1979
Total							
Amount (000)	$2,466,690	$3,950,281	$3,661,125	$2,899,279	$2,956,200	$3,189,650	$2,908,350
No. of Issues	82	78	101	75	70	73	69
Distribution							
Amount (000)	$216,500	$188,700	$321,375	$225,965	$176,000	$503,750	$371,150
No. of Issues	20	10	22	12	8	11	14
Transmission							
Amount (000)	$220,000	$145,831	$227,000	$125,000	$75,000	$0	$167,000
No. of Issues	11	3	6	2	3	0	3
Integrated							
Amount (000)	$106,500	$165,500	$234,750	$111,000	$158,500	$188,000	$111,100
No. of Issues	7	7	11	5	10	8	9
Combination Utilities							
Amount (000)	$1,793,690	$3,305,250	$2,678,000	$2,364,814	$2,496,700	$2,446,400	$2,259,100
No. of Issues	41	56	59	54	48	52	43
Gas Holding[b]							
Amount (000)	$130,000	$145,000	$200,000	$72,500	$50,000	$51,500	$0
No. of Issues	3	2	3	2	1	2	0

a. See Footnote "b". Table 120 for description of securities included and the derivation of stated amounts.
b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

TABLE 128
GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF BOND ISSUES
1973–1979[a]

	1973		1974		1975		1976		1977		1978		1979	
	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield
Total														
Average	7.98	7.91	9.76	9.67	10.10	10.00	8.96	8.87	8.51	8.45	8.40	8.38	11.14	11.12
Weighted Average	7.93	7.87	9.84	9.75	10.06	9.97	9.01	8.93	8.50	8.44	8.18	8.01	10.55	10.48
Sample Amount (000)		$2,137,890		$3,322,000		$3,346,050		$2,826,590		$2,682,200		$2,669,900		$2,348,300
Distribution														
Average	8.31	8.21	9.20	9.11	9.96	9.85	8.44	8.39	8.78	8.72	7.00	7.10	11.32	11.26
Weighted Average	8.31	8.21	9.04	8.97	9.95	9.84	8.93	8.87	8.62	8.54	6.67	6.61	11.10	11.42
Sample Amount (000)		$186,250		$170,000		$241,550		$201,365		$123,000		$310,000		$224,150
Transmission														
Average	8.48	8.40	9.34	9.28	10.26	10.13	9.09	9.00	0.00	0.00	0.00	0.00	10.63	10.53
Weighted Average	8.54	8.47	9.59	9.52	10.23	10.09	9.25	9.16	0.00	0.00	0.00	0.00	10.63	10.53
Sample Amount (000)		$160,000		$62,000		$207,000		$125,000		$0		$0		$50,000
Integrated														
Average	8.06	7.96	10.25	10.13	10.44	10.36	9.52	9.43	8.97	8.89	8.50	8.45	12.85	12.75
Weighted Average	8.08	7.96	10.49	10.38	10.53	10.43	9.28	9.19	8.86	8.79	8.96	8.88	12.85	12.75
Sample Amount (000)		$75,000		$94,000		$170,000		$79,000		$129,000		$157,000		$70,000
Combination Utilities														
Average	7.76	7.69	9.84	9.75	10.09	9.99	8.93	8.89	8.42	8.36	8.85	8.78	9.74	9.92
Weighted Average	7.84	7.79	9.91	9.82	10.04	9.95	8.99	8.92	8.47	8.41	9.19	9.12	10.40	10.29
Sample Amount (000)		$1,586,640		$2,921,000		$2,527,500		$2,351,225		$2,380,200		$2,152,900		$2,004,150
Gas Holding[b]														
Average	7.70	7.60	8.40	8.34	9.90	9.81	9.00	8.94	8.41	8.34	9.23	9.18	0.00	0.00
Weighted Average	7.69	7.58	8.40	8.34	9.93	9.84	9.00	8.94	8.41	8.34	9.23	9.18	0.00	0.00
Sample Amount (000)		$130,000		$75,000		$200,000		$70,000		$50,000		$50,000		$0

a. Includes only those issues in Table 127 for which necessary cost and yield data were available.
b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.
Definitions: "Cost" refers to the expenses incurred by a company. It includes, dividends, underwriter fees, plus discount expenses less premiums.
"Yield" is the rate of return on investment by a buyer.

TABLE 129

GAS UTILITY INDUSTRY DEBENTURE ISSUES, BY TYPE OF COMPANY 1973-1979[a]

Type of Company	1973	1974	1975	1976	1977	1978	1979
Total							
Amount (000)	$260,000	$739,519	$911,571	$860,500	$461,500	$306,516	$895,000
No. of Issues	6	17	19	16	10	12	11
Distribution							
Amount (000)	$0	$20,000	$0	$25,000	$70,000	$0	$40,000
No. of Issues	0	1	0	1	3	0	1
Transmission							
Amount (000)	$60,000	$368,169	$360,771	$370,000	$175,000	$130,000	$450,000
No. of Issues	1	5	8	6	1	2	4
Integrated							
Amount (000)	$45,000	$140,700	$234,800	$315,500	$101,500	$106,500	$215,000
No. of Issues	1	4	6	7	4	7	3
Combination Utilities							
Amount (000)	$25,000	$0	$100,000	$0	$0	$70,016	$15,000
No. of Issues	1	0	1	0	0	3	1
Gas Holding[b]							
Amount (000)	$130,000	$210,650	$216,000	$150,000	$115,000	$0	$175,000
No. of Issues	3	7	4	2	2	0	2

a. See Footnote "b", Table 120 for description of securities included and the derivation of stated amounts.

b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

TABLE 130
GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF DEBENTURE ISSUES
1973-1979[a]

	1973		1974		1975		1976		1977		1978		1979	
	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield
Total														
Average	7.80	7.73	9.48	9.40	10.28	10.17	8.88	8.81	8.74	8.63	9.26	9.12	10.81	10.65
Weighted Average	7.77	7.71	9.34	9.25	10.31	10.20	8.87	8.80	8.36	8.29	9.02	8.89	11.12	11.04
Sample Amount (000)		$200,000		$535,000		$801,000		$735,000		$265,000		$150,000		$645,000
Distribution														
Average	0.00	0.00	9.34	9.25	0.00	0.00	0.00	0.00	7.36	7.28	0.00	0.00	9.93	9.88
Weighted Average	0.00	0.00	9.34	9.25	0.00	0.00	0.00	0.00	7.36	7.28	0.00	0.00	9.93	9.88
Sample Amount (000)		$0		$20,000		$0		$0		$50,000		$0		$40,000
Transmission														
Average	0.00	0.00	8.91	8.84	10.07	9.99	8.92	8.84	0.00	0.00	0.00	0.00	11.31	11.22
Weighted Average	0.00	0.00	8.95	8.88	10.08	10.00	8.88	8.79	0.00	0.00	0.00	0.00	11.40	11.30
Sample Amount (000)		$0		$190,000		$255,000		$270,000		$0		$0		$200,000
Integrated														
Average	7.72	7.65	9.15	9.08	10.06	9.95	8.87	8.79	9.39	9.24	9.69	9.55	10.75	10.68
Weighted Average	7.72	7.65	9.23	9.16	9.85	9.76	8.88	8.80	8.87	8.77	9.21	9.11	10.98	10.94
Sample Amount (000)		$45,000		$140,000		$230,000		$315,000		$100,000		$80,000		$215,000
Combination Utilities														
Average	7.56	7.46	0.00	0.00	12.86	12.62	0.00	0.00	0.00	0.00	8.83	8.68	10.92	10.38
Weighted Average	7.56	7.46	0.00	0.00	12.86	12.62	0.00	0.00	0.00	0.00	8.81	8.64	10.92	10.38
Sample Amount (000)		$25,000		$0		$100,000		$0		$0		$70,000		$15,000
Gas Holding[b]														
Average	7.91	7.85	10.19	10.08	10.22	10.11	8.84	8.79	8.44	8.38	0.00	0.00	11.16	11.08
Weighted Average	7.83	7.78	9.82	9.72	9.89	9.80	8.84	8.79	8.36	8.31	0.00	0.00	11.27	11.18
Sample Amount (000)		$130,000		$185,000		$216,000		$150,000		$115,000		$0		$175,000

a. Includes only those issues in Table 129 for which necessary cost and yield data were available.
b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.
Definitions: "Cost" refers to the expenses incurred by a company. It includes, dividends, underwriter fees, plus discount expenses less premiums.
"Yield" is the rate of return on investment by a buyer.

TABLE 131
GAS UTILITY INDUSTRY NOTE ISSUES, BY TYPE OF COMPANY
1973-1979[a]

Type of Company	1973	1974	1975	1976	1977	1978	1979
Total							
Amount (000)	$1,093,319	$926,840	$707,098	$1,763,232	$1,855,704	$1,214,389	$1,521,653
No. of Issues	63	50	50	52	49	55	50
Distribution							
Amount (000)	$22,600	$67,500	$7,000	$34,400	$43,585	$97,854	$140,500
No. of Issues	6	5	3	3	8	6	6
Transmission							
Amount (000)	$524,550	$262,500	$510,951	$1,320,119	$663,644	$468,150	$666,066
No. of Issues	18	17	24	20	15	12	7
Integrated							
Amount (000)	$61,726	$50,082	$58,316	$101,070	$882,390	$215,441	$318,770
No. of Issues	8	4	7	11	8	15	14
Combination Utilities							
Amount (000)	$460,003	$546,758	$125,836	$252,357	$254,774	$432,775	$396,317
No. of Issues	28	24	11	14	16	21	23
Gas Holding[b]							
Amount (000)	$24,440	$0	$4,995	$55,286	$11,311	$169	$0
No. of Issues	3	0	5	4	2	1	0

a. See Footnote "b". Table 120 for description of securities included and the derivation of stated amounts.

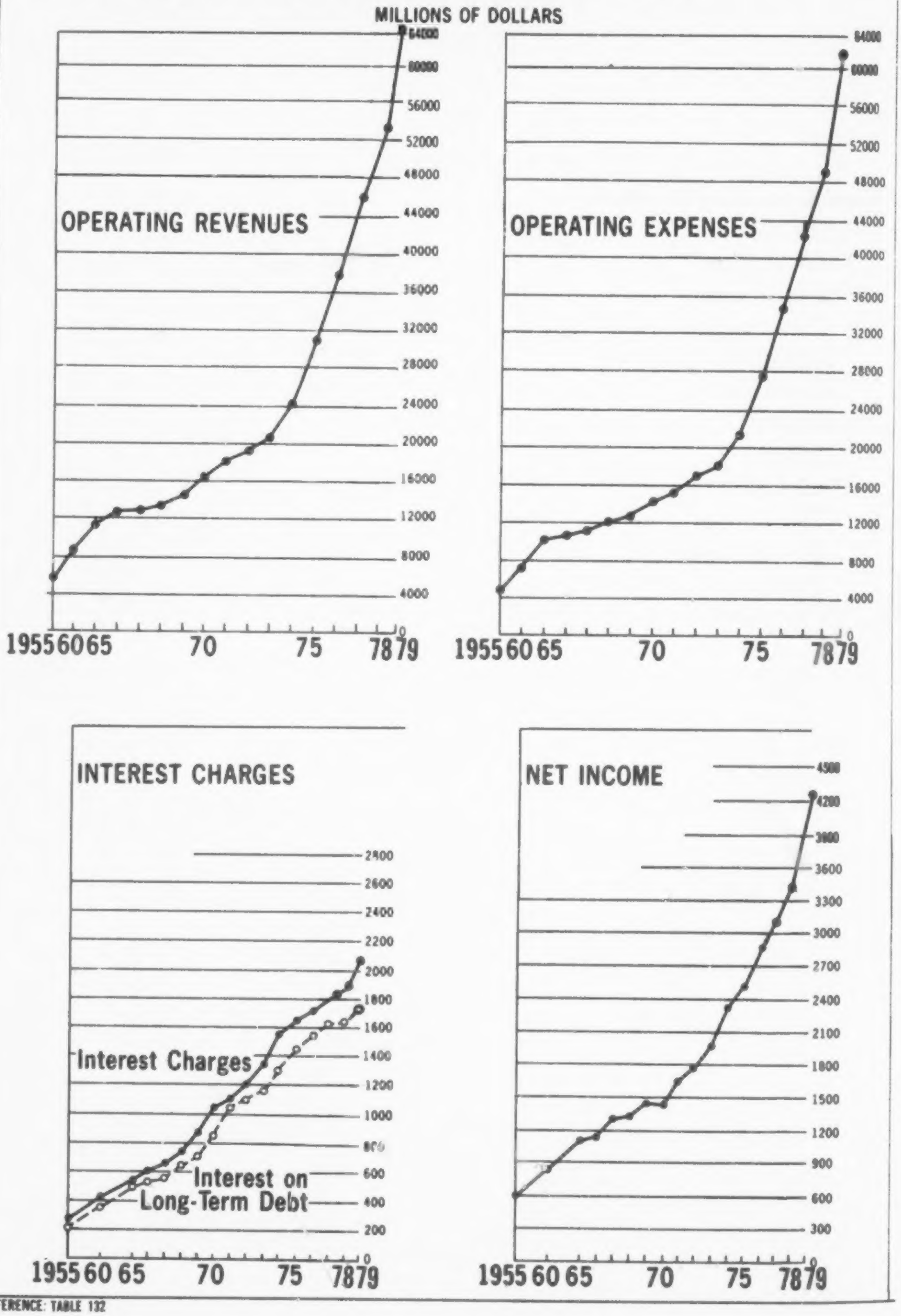
b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

SECTION XII
FINANCE
PART 2. INCOME ACCOUNTS

	1979	% Change 79/78
Total Operating Revenues		
(Millions)		
Total Industry	$66,931	+26.3
Distribution	11,767	+18.4
Transmission	29,919	+30.1
Integrated	14,439	+28.2
Combination	10,806	+22.7
Net Income		
(Millions)		
Total Industry	$ 4,208	+22.2
Distribution	518	+19.6
Transmission	2,350	+23.5
Integrated	807	+34.3
Combination	533	+ 5.3

CHART [illegible]9

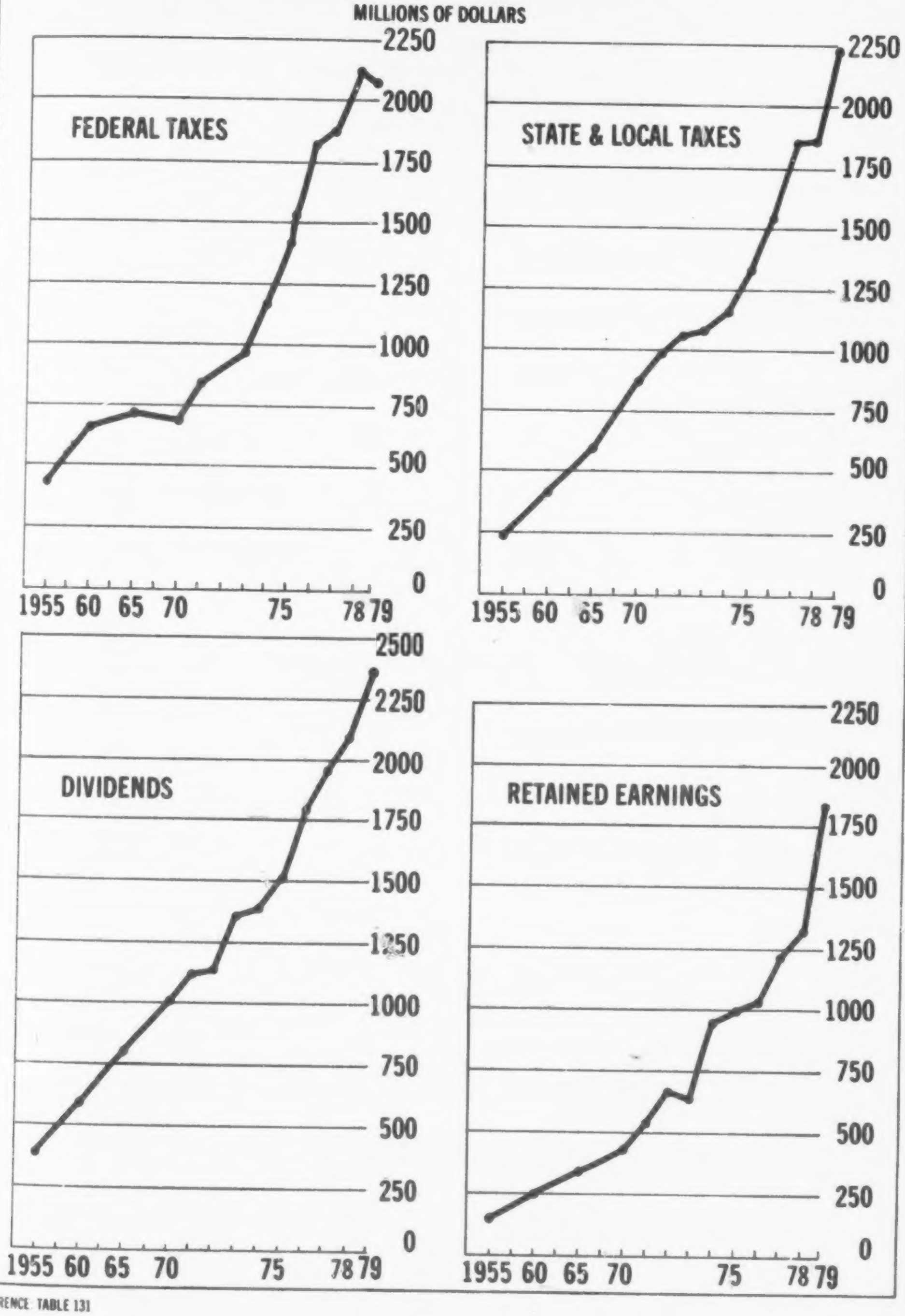
COMPOSITE INCOME ACCOUNTS GAS UTILITY INDUSTRY (INVESTOR-OWNED)



REFERENCE: TABLE 132

CHART 20

GAS UTILITY INDUSTRY DISPOSITION OF NET INCOME AND TAXES (INVESTOR-OWNED)



REFERENCE: TABLE 131

TABLE 132
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TOTAL INDUSTRY[a] 1955-1979

(Millions)

	1955	1960	1965	1970	1975	1978	1979
Total Operating Revenues	$5,063	$8,69[illegible]	$11,525	$16,380	$30,550	$52,995	$66,931
Operation Expenses	3,193	5,689	7,657	11,205	22,254	42,149	55,185
Maintenance Expenses	190	262	316	431	703	959	1,096
Total Operation and Maintenance Expenses	3,383	5,951	7,973	11,636	22,957	43,108	56,281
Depreciation, Retirements, Depletion, etc.	349	578	798	1,101	1,760	2,184	2,311
Federal Income Taxes[b]		540	633	605	965	1,484	1,006
Provision for Deferred Federal Income Taxes	409 }	{ 79	45	34 }	465	1,010	1,732
Portion of Current Federal Income Taxes Provided For in Prior Years					(252)	(733)	(989)
Investment Tax Credit Adjustment	b	b	b	b	130	210	151
Other Federal Taxes	13	22	27	55	109	149	178
State Income Taxes	14	23	26	46	116	169	164
Other State and Local Taxes	230	394	561	829	1,230	1,691	2,052
Total Taxes	666	1,058	1,292	1,569	2,763	3,980	4,294
Total Operating Expenses	4,398	7,587	10,063	14,306	27,480	49,272	62,887
Operating Income	665	1,109	1,462	2,074	3,070	3,723	4,043
Other Operating Income	2	3	7	12	21	22	13
Allowance for Funds Used During Construction	15	25	34	73	130	199	240
Utility Operating Income	682	1,137	1,503	2,159	3,221	3,944	4,296
Other Income (Non-Operating) (Net)[c]	48	110	157	298	916[d]	1,441[d]	2,007[d]
Income Before Interest Charges	730	1,247	1,660	2,457	4,137[d]	5,385[d]	6,303[d]
Interest on Long-Term Debt	197	374	499	867	1,423	1,639	1,763
Amortization of Debt Disc. Exp. and Premium	2	2	5	9	12	17	15
Other Interest Expense (Net)	22	41	49	154	203	224	384
Total Interest Charges	221	417	553	1,030	1,638	1,880	2,163
Net Income Before Extraordinary Items	e	e	e	e	2,499[d]	3,505[d]	4,140[d]
Extraordinary Items, Less Taxes	c	c	c	c	3	(62)	68
Net Income	509	830	1,107	1,427	2,502[d]	3,443[d]	4,208[d]
Preferred Dividends	41	69	78	129	184	259	266
Common Dividends	335	512	703	877	1,325	1,858	2,096
Note:							
Number of Companies Reporting[f]	267	310	304	291	204	192	180
Op. Rev. of Companies Reporting (Millions)	$4,365	$8,112	$10,751	$15,776	$29,057	$48,293	$58,724

a. For combination companies, only gas operations are included.
b. "Investment Tax Credit Adjustment" included in "Federal Income Taxes" prior to 1971.
c. "Extraordinary Items" included in "Other Income (Non-Operating) (Net)" prior to 1971.
d. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
e. Not available.
f. Financial data of report companies expanded to represent total industry on the basis of operating revenues. As of 1971 total number of sample companies limited to companies with operating revenues over $3,000,000.
( ):Denotes negative.

INCOME ACCOUNTS

TABLE 133
COMPOSITE INCOME ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY DISTRIBUTION COMPANIES, 1973–1979

(Millions)

	1973	1974	1975	1976[a]	1977	1978	1979
Total Operating Revenues	$4,243	$4,874	$5,938	$7,375	$8,705	$9,936	$11,767
Operation Expenses	2,965	3,484	4,333	5,613	6,696	7,766	9,410
Maintenance Expenses	131	142	165	179	206	213	233
Total Operation and Maintenance Expenses	3,096	3,625	4,498	5,792	6,902	7,979	9,643
Depreciation, Retirements, Depletion, etc.	200	217	246	270	284	299	315
Federal Income Taxes	115	105	117	139	206	218	209
Provision for Deferred Federal Income Taxes	27	46	67	72	77	91	106
Portion of Current Federal Income Taxes Provided For in Prior Years	(1)	(3)	(6)	(28)	(26)	(19)	(30)
Investment Tax Credit Adjustment	14	18	26	35	35	34	32
Other Federal Taxes	25	28	30	32	35	39	45
State Income Taxes	12	12	17	16	20	25	26
Other State and Local Taxes	323	349	414	476	554	615	668
Total Taxes	516	555	665	742	901	1,001	1,056
Total Operating Expenses	3,811	4,397	5,409	6,804	8,087	9,279	11,014
Operating Income	432	478	529	571	618	657	753
Other Operating Income	6	4	4	2	1	2	2
Allowance for Funds Used During Construction	8	13	8	7	3	3	5
Utility Operating Income	445	494	541	580	622	662	760
Other Income (Non-Operating)(Net)	18	23	21	21	24	38	56
Income Before Interest Charges	463	517	562	601	646	700	816
Interest on Long-Term Debt	170	184	213	224	225	233	252
Amortization of Debt Disc. Exp. and Premium	1	1	2	2	2	2	2
Other Interest Expense (Net)	23	45	34	27	23	33	48
Total Interest Charges	194	230	249	253	250	267	303
Net Income Before Extraordinary Items	269	288	313	348	396	433	513
Extraordinary Items, Less Taxes	1	b	3	(4)	4	b	5
Net Income	270	288	316	344	400	433	518
Preferred Dividends	17	19	21	25	23	24	27
Common Dividends	192	201	212	217	259	273	333
Note:							
Number of Companies Reporting	59	56	57	55	53	53	51
Op. Rev. of Companies Reporting (Millions)	$4,015	$4,674	$5,572	$6,773	$8,305	$9,936	$10,747

a. Data not directly comparable to previous years due to reclassification of several companies.
b. Less than $500,000.
( ): Denotes negative.

TABLE 134
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TRANSMISSION COMPANIES, 1955-1979

(Millions)

	1955	1960	1965	1970[a]	1975	1978	1979
Total Operating Revenues	$1,655	$3,190	$4,088	$5,928	$11,898	$22,989	$29,919
Operation Expenses	980	2,031	2,747	4,094	8,463	18,357	24,923
Maintenance Expenses	39	64	78	109	187	284	336
Total Operation and Maintenance Expenses	1,019	2,095	2,825	4,203	8,650	18,641	25,259
Depreciation, Retirements, Depletion, etc.	159	284	357	509	896	1,157	1,186
Federal Income Taxes[c]		163	212	200	646	919	606
Provision for Deferred Federal Income Taxes	140				246	656	1,130
Portion of Current Federal Income Taxes Provided For in Prior Years		56	13	(9)	(221)	(581)	(789)
Investment Tax Credit Adjustment	b	b	b	b	48	102	53
Other Federal Taxes	2	4	5	11	22	33	41
State Income Taxes	4	8	8	12	52	79	60
Other State and Local Taxes	46	88	117	162	221	274	490
Total Taxes	192	319	355	376	1,014	1,482	1,591
Total Operating Expenses	1,370	2,698	3,537	5,088	10,560	21,280	28,036
Operating Income	285	492	551	840	1,338	1,709	1,882
Other Operating Income	c	c	c	c	c	c	c
Allowance for Funds Used During Construction	8	11	18	24	38	82	84
Utility Operating Income	293	503	569	864	1,376	1,790	1,966
Other Income (Non-Operating) (Net)[d]	14	32	70	190	640[e]	1,106[e]	1,473[e]
Income Before Interest Charges	307	535	639	1,054	2,016[e]	2,896[e]	3,439[e]
Interest on Long-Term Debt	98	195	237	414	643	797	858
Amortization of Debt Disc. Exp. and Premium	1	2	4	7	7	10	8
Other Interest Expense (Net)	8	21	20	70	110	123	223
Total Interest Charges	107	218	261	491	760	930	1,089
Net Income Before Extraordinary Items	f	f	f	f	1,256[e]	1,967[e]	2,350[e]
Extraordinary Items, Less Taxes	d	d	d	d	0	(64)	0
Net Income	200	317	378	563	1,256[e]	1,903[e]	2,350[e]
Preferred Dividends	18	33	38	79	79	123	122
Common Dividends	119	184	258	351	600	997	1,120
Note:							
Number of Companies Reporting	48	48	47	39	33	35	31
Op. Rev. of Companies Reporting (Millions)	$1,608	$3,092	$3,999	$5,729	$11,192	$19,798	$25,427

a. Data not directly comparable to previous years due to reclassification of several companies.
b. "Investment Tax Credit Adjustment" included in "Federal Income Taxes" prior to 1971.
c. Less than $500,000.
d. "Extraordinary Items" included in "Other Income (Non-Operating) (Net)" prior to 1971.
e. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
f. Not available.
( ):Denotes negative.

INCOME ACCOUNTS

TABLE 135
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
INTEGRATED COMPANIES, 1973–1979

(Millions)

	1973	1974	1975	1976[a]	1977	1978	1979
Total Operating Revenues	$4,675	$5,631	$6,962	$7,803	$9,800	$11,266	$14,439
Operation Expenses	3,207	4,021	5,200	5,998	7,771	9,155	12,116
Maintenance Expenses	126	145	157	176	209	231	265
Total Operation and Maintenance Expenses	3,332	4,165	5,357	6,174	7,980	9,385	12,381
Depreciation, Retirements, Depletion, etc.	300	325	345	356	368	407	464
Federal Income Taxes	127	135	188	224	230	180	24
Provision for Deferred Federal Income Taxes	68	79	79	102	103	153	375
Portion of Current Federal Income Taxes Provided For in Prior Years	(7)	(17)	(15)	(25)	(46)	(64)	(85)
Investment Tax Credit Adjustment	14	16	28	31	43	49	37
Other Federal Taxes	24	27	28	31	35	40	48
State Income Taxes	15	24	30	32	33	46	56
Other State and Local Taxes	205	226	244	267	323	349	401
Total Taxes	445	490	582	662	721	752	857
Total Operating Expenses	4,077	4,980	6,284	7,192	9,070	10,544	13,702
Operating Income	597	652	678	611	730	722	737
Other Operating Income	11	14	17	14	11	9	11
Allowance for Funds Used During Construction	10	8	10	9	8	10	12
Utility Operating Income	618	673	705	634	749	741	760
Other Income (Non-Operating) (Net)	139	224	231	292	268	257	433
Income Before Interest Charges	757	896	936	926	1,017	998	1,193
Interest on Long-Term Debt	282	309	321	336	335	341	356
Amortization of Debt Disc. Exp. and Premium	3	3	3	2	4	3	3
Other Interest Expense (Net)	29	51	39	30	29	54	90
Total Interest Charges	313	363	363	368	368	398	449
Net Income Before Extraordinary Items	444	533	573	558	649	600	744
Extraordinary Items, Less Taxes	b	0	2	5	b	1	63
Net Income	444	533	575	563	649	601	807
Preferred Dividends	16	19	22	21	32	35	35
Common Dividends	264	279	336	403	353	366	392
Note:							
Number of Companies Reporting	49	47	49	46	41	43	40
Op. Rev. of Companies Reporting (Millions)	$4,323	$5,148	$6,622	$7,049	$9,317	$10,261	$12,180

a. Data not directly comparable to previous years due to reclassification of several companies.
b. Less than $500,000.
( ): Denotes negative.

TABLE 136
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
COMBINATION COMPANIES, 1973–1979

(Millions)

	1973	1974	1975	1976	1977	1978	1979
	Gas Operations						
Total Operating Revenues	$ 3,956	$ 4,605	$ 5,753	$ 7,023	$ 7,968	$ 8,804	$10,806
Operation Expenses	2,695	3,234	4,259	5,223	6,179	6,871	8,737
Maintenance Expenses	177	183	195	204	236	231	262
Total Operations and Maintenance Expenses	2,871	3,417	4,454	5,427	6,415	7,102	8,998
Depreciation, Retirements, Depletion, etc.	228	251	273	296	313	321	346
Federal Income Taxes	51	55	14	134	85	167	167
Provision for Deferred Federal Income Taxes	27	35	74	56	130	110	121
Portion of Current Federal Income Taxes Provided For in Prior Years	(5)	(7)	(10)	(22)	(72)	(69)	(85)
Investment Tax Credit Adjustment	12	4	28	44	27	25	29
Other Federal Taxes	24	27	29	31	33	37	44
State Income Taxes	8	5	17	20	17	18	22
Other State and Local Taxes	294	314	351	406	438	453	493
Total Taxes	411	433	503	669	658	741	790
Total Operating Expenses	3,510	4,100	5,230	6,392	7,386	8,164	10,135
Operating Income[a]	446	505	523	631	582	641	671
	Total Operations						
Total Operating Revenues	$15,437	$19,098	$22,831	$25,444	$28,781	$30,695	$36,232
Operation Expenses	7,831	10,828	13,060	14,656	17,213	18,342	22,632
Maintenance Expenses	1,002	1,089	1,193	1,305	1,504	1,672	2,019
Total Operation and Maintenance Expenses	8,833	11,917	14,253	15,961	18,717	20,013	24,651
Depreciation, Retirements, Depletion, etc.	1,423	1,558	1,748	1,858	1,953	2,082	2,349
Federal Income Taxes	285	140	241	260	404	470	350
Provision for Deferred Federal Income Taxes	172	287	399	456	610	833	963
Portion of Current Federal Income Taxes Provided For in Prior Years	(34)	(48)	(87)	(116)	(256)	(379)	(334)
Investment Tax Credit Adjustment	71	51	220	474	427	430	334
Other Federal Taxes	101	111	118	125	136	152	196
State Income Taxes	70	64	94	106	107	132	140
Other State and Local Taxes	1,617	1,811	2,036	2,211	2,369	2,422	2,605
Total Taxes	2,282	2,416	3,021	3,516	3,797	4,061	4,253
Total Operating Expenses	12,538	15,891	19,022	21,335	24,467	26,157	31,253
Operating Income	2,899	3,207	3,809	4,109	4,314	4,538	4,979
Other Operating Income	3	5	6	7	8	b	b
Allowance for Funds Used During Construction	559	617	626	663	775	887	1,231
Utility Operating Income	3,461	3,829	4,441	4,779	5,097	5,425	6,209
Other Income (Non-Operating)(Net)	84	127	152	188	179	247	302
Income before Interest Charges	3,544	3,956	4,593	4,967	5,276	5,672	6,511
Interest on Long-Term Debt	1,380	1,586	1,885	1,998	2,104	2,238	2,594
Amortization of Debt Disc. Exp. and Premium	3	4	8	9	12	14	15
Other Interest Expense (Net)	120	255	171	102	103	119	188
Total Interest Charges	1,503	1,845	2,064	2,109	2,219	2,370	2,796
Net Income Before Extraordinary Items	2,042	2,111	2,529	2,858	3,057	3,302	3,715
Extraordinary Income Less Taxes	46	55	(25)	0	0	0	0
Net Income	2,087	2,166	2,504	2,858	3,057	3,302	3,715
Preferred Dividends	364	427	494	552	591	637	708
Common Dividends	1,159	1,173	1,343	1,492	1,630	1,828	2,183
Note:							
Number of Companies Reporting	66	66	65	63	60	61	58
Total Op. Revenues of Companies Reporting (Millions)	$15,094	$18,884	$22,506	$24,925	$27,803	$30,370	$34,771
Gas Revenues of Companies Reporting (Millions)	$ 3,868	$ 4,554	$ 5,671	$ 6,880	$ 7,097	$ 8,711	$10,370

a. Includes "Other Operating Income" which was less than $500,000 in each year.
b. Less than $500,000.
( ): Denotes negative.

TABLE 137
INVESTOR-OWNED GAS UTILITY INDUSTRY
GAS OPERATION AND MAINTENANCE EXPENSES
BY TYPE OF COMPANY, 1978–1979

(Millions)

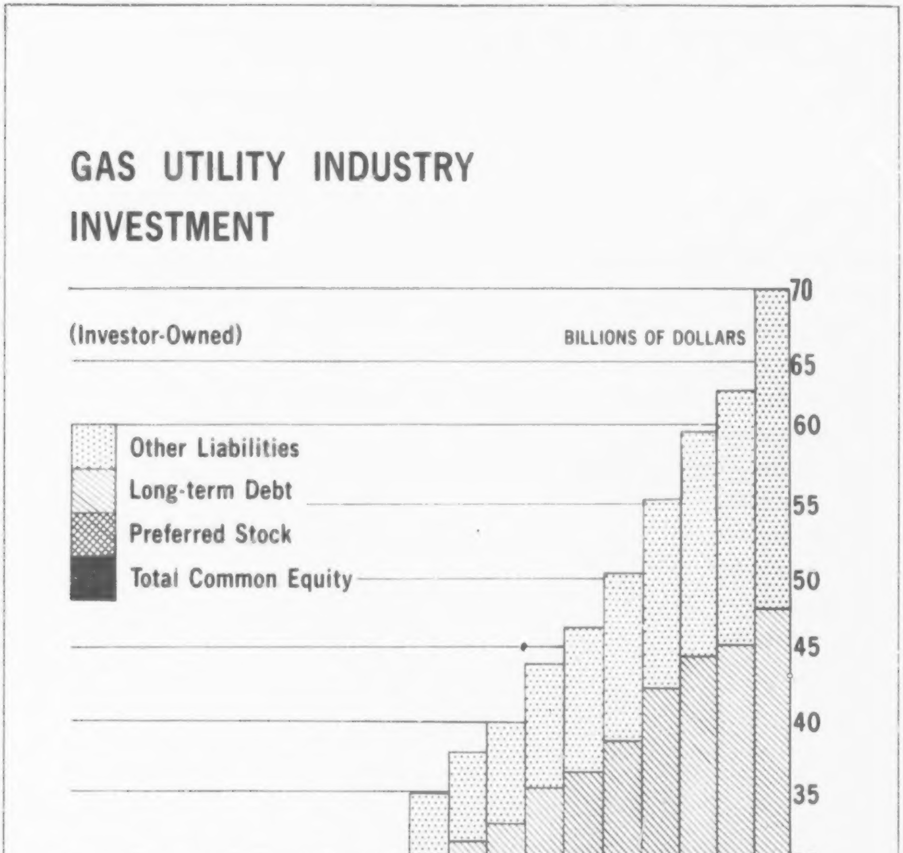
	1978		1979	
Total Industry				
Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$35,956	$ 0	$47,201	$ 0
Other Production and Purch. Exp. and Adjustments	952	109	1,060	129
Production and Purchases, Total	36,908	109	48,261	129
Storage	329	57	403	67
Transmission	1,365	245	2,182	292
Distribution	785	513	1,075	565
Customer accounts	791	a	827	a
Sales	107	a	116	a
Administrative and General	1,864	35	2,142	43
Customer Service	b	b	180	a
Total	42,149	958	55,186	1,096
Distribution Companies				
Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$ 6,208	$ 0	$ 7,661	$ 0
Other Production and Purch. Exp. and Adjustments	476	9	443	9
Production and Purchases, Total	6,684	9	8,104	9
Storage	33	8	42	9
Transmission	4	2	11	6
Distribution	293	185	418	198
Customer accounts	309	a	319	a
Sales	44	a	42	a
Administrative and General	398	10	446	11
Customer Service	b	b	28	a
Total	7,766	213	9,410	233
Transmission Companies				
Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$16,252	$ 0	$21,755	$ 0
Other Production and Purch. Exp. and Adjustments	257	67	482	80
Production and Purchases, Total	16,509	67	22,237	80
Storage	165	23	207	27
Transmission	1,041	189	1,740	224
Distribution	a	a	0	0
Customer accounts	5	0	5	0
Sales	4	0	5	0
Administrative and General	633	5	727	5
Customer Service	b	b	2	0
Total	18,357	284	24,923	336
Integrated Companies				
Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$ 7,684	$ 0	$10,290	$ 0
Other Production and Purch. Exp. and Adjustments	137	22	60	28
Production and Purchase, Total	7,821	22	10,350	28
Storage	100	18	105	22
Transmission	263	43	360	49
Distribution	233	140	363	155
Customer accounts	238	a	273	a
Sales	38	0	61	a
Administrative and General	461	8	527	11
Customer Service	b	b	77	0
Total	9,155	231	12,116	265
Combination Companies				
Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$ 5,812	$ 0	$ 7,495	$ 0
Other Production and Purch. Exp. and Adjustments	82	11	75	12
Production and Purchases, Total	5,894	11	7,570	12
Storage	31	8	49	9
Transmission	57	11	71	13
Distribution	259	188	294	212
Customer accounts	239	0	230	0
Sales	21	0	8	a
Administrative and General	372	12	442	16
Customer Service	b	b	73	0
Total	6,871	231	8,737	262

a. Less than $500,000.
b. Not available.

SECTION XII
FINANCE
PART 3. BALANCE SHEETS

	1979	% Change 79/78
Gas Utility Plant (Millions)		
Total Industry	$62,710	+6.2
Distribution	10,166	+5.7
Transmission	27,653	+5.0
Integrated	13,551	+7.1
Combination	11,340	+9.0
Total Common Equity (Millions)		
Total Industry	$23,771	+6.2
Distribution	3,158	+7.5
Transmission	12,600	+6.1
Integrated	5,067	+7.2
Combination	2,946	+3.5

CHART 21



REFERENCE: TABLE 130

BALANCE SHEETS

TABLE 138
COMPOSITE BALANCE SHEET ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY TOTAL INDUSTRY, 1955-1979

(Millions)

	1955	1960	1965	1970	1975	1978	1979
ASSETS							
Total Gas Utility Plant	$13.305	$20.835	$28.205	$38.541	$49.384	$59.033	$62.710
Less Accum. Prov. for Depr. and Amort.	2.775	4.570	7.205	10.696	16.779	22.861	24.400
Net Gas Utility Plant (Total)	10.530	16.265	21.000	27.845	32.605	36.172	38.310
Investment and Fund Accounts	525	1.380	1.885	3.024	9.198[a]	12.802[a]	14.097[a]
Current and Accrued Assets	1.465	2.185	2.545	3.674	7.543	12.129	15.427
Deferred Debits[b]	140	170	210	386	940	1.815	2.411
Total Assets	12.660	20.000	25.640	34.929	50.286[a]	62.918[a]	70.245[a]
LIABILITIES							
Common Stock	2.600	3.540	4.360	4.727	5.803	6.348	6.732
Retained Earnings	1.040	1.880	2.715	4.230	7.911[a]	11.337[a]	12.258[a]
Other Paid-in Capital[c]	645	1.045	1.390	2.063	3.245	4.704	4.781
Total Common Equity	4.285	6.465	8.465	11.020	16.959[a]	22.389[a]	23.771[a]
Preferred Stock	860	1.345	1.540	1.945	2.541	3.196	3.363
Total Capital Stock	5.145	7.810	10.005	12.965	19.500[a]	25.585[a]	27.135[a]
Bonds	4.315	6.265	7.525	9.248	10.493	9.913	9.444
Debentures	830	1.445	2.560	4.274	5.174	5.365	5.253
Other Long-Term Debt	755	1.420	1.430	2.159	3.877	4.967	6.333
Total Long-Term Debt	5.900	9.130	11.515	15,681	19.544	20.245	21.030
Total Capitalization	11.045	16.940	21.520	28.646	39.044[a]	45.830[a]	48.165[a]
Current and Accrued Liabilities	1.390	2.420	3.035	4.832	8.158	11.704	16.024
Deferred Credits	80	85	215	370	752	1.599	1.514
Operating Reserves	95[d]	110	55	48	194	726	666
Contributions in Aid of Construction	50	95	155	245	86	68	77
Reserves for Deferred Income Taxes	d	350	660	788	207	457	535
Accumulated Deferred Income Taxes					1.845	2.534	3.263
Total Liabilities	12.660	20.000	25.640	34.929	50.286[a]	62.918[a]	70.245[a]

[a] Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.

[b] Includes "Capital Stock Discount and Expense" and "Reacquired Securities."

[c] Includes accounts formerly detailed in "Premiums, Assessments, etc." and "Capital Surplus."

[d] "Reserves for Deferred Income Taxes" included in "Operating Reserves."

TABLE 139
COMPOSITE BALANCE SHEET ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY DISTRIBUTION COMPANIES, 1973-1979

(Millions)

	1973	1974	1975	1976*	1977	1978	1979
ASSETS							
Total Gas Utility Plant	$7,690	$8,073	$8,547	$9,013	$9,153	$9,619	$10,166
Less Accum. Prov. for Depr. and Amort.	1,754	1,892	2,075	2,328	2,465	2,690	2,892
Net Gas Utility Plant (Total)	5,937	6,181	6,472	6,685	6,688	6,929	7,274
Investment and Fund Accounts	186	203	223	241	286	356	464
Current and Accrued Assets	900	1,074	1,379	1,772	1,850	1,935	2,454
Deferred Debits	67	86	138	141	126	167	191
Total Assets	7,089	7,543	8,212	8,839	8,950	9,387	10,383
LIABILITIES							
Common Stock	1,021	1,027	1,110	1,035	1,042	1,064	1,108
Retained Earnings	1,005	1,054	1,157	1,182	1,246	1,388	1,531
Other Paid-in Capital	318	331	337	488	489	485	519
Total Common Equity	2,343	2,412	2,604	2,705	2,777	2,937	3,158
Preferred Stock	300	315	330	350	299	355	378
Total Capital Stock	2,643	2,727	2,934	3,055	3,076	3,292	3,536
Bonds	1,983	1,965	2,190	2,375	2,297	2,228	2,125
Debentures	256	264	312	304	145	127	121
Other Long-Term Debt	535	575	575	638	630	701	874
Total Long-Term Debt	2,774	2,803	3,077	3,317	3,072	3,056	3,120
Total Capitalization	5,417	5,530	6,011	6,372	6,148	6,348	6,656
Current and Accrued Liabilities	1,269	1,584	1,640	1,820	2,018	2,125	2,701
Deferred Credits	124	127	161	208	272	302	350
Operating Reserves	9	10	13	14	17	20	23
Contributions in Aid of Construction	83	58	56	39	44	51	54
Reserves for Deferred Income Taxes	85	97	110	144	168	338	392
Accumulated Deferred Income Taxes	103	138	221	243	283	203	207
Total Liabilities	7,089	7,543	8,212	8,840	8,950	9,387	10,383

*Data not directly comparable to previous years due to reclassification of several companies.

TABLE 140

COMPOSITE BALANCE SHEET ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TRANSMISSION COMPANIES, 1955–1979

(Millions)

	1955	1960	1965	1970[a]	1975	1978	1979
ASSETS							
Total Gas Utility Plant	$5,190	$8,960	$11,505	$16,363	$20,351	$26,347	$27,653
Less Accum. Prov. for Depr. and Amort.	985	2,040	3,375	5,311	8,636	12,640	13,335
Net Gas Utility Plant (Total)	4,205	6,920	8,130	11,052	11,714	13,707	14,318
Investment and Fund Accounts	215	870	1,060	1,889	6,791[b]	10,094[b]	10,807[b]
Current and Accrued Assets	535	840	950	1,384	3,459	6,571	8,253
Deferred Debits[c]	30	65	100	192	516	1,220	1,639
Total Assets	4,985	8,695	10,240	14,517	22,480[b]	31,591[b]	35,016[b]
LIABILITIES							
Common Stock	655	1,105	1,225	1,477	1,984	2,373	2,569
Retained Earnings	365	665	815	1,430	4,010[b]	6,726[b]	7,215[b]
Other Paid-in Capital[d]	290	570	770	1,233	1,891	2,780	2,815
Total Common Equity	1,310	2,340	2,810	4,140	7,885[b]	11,879[b]	12,600[b]
Preferred Stock	365	640	715	1,019	1,012	1,541	1,515
Total Capital Stock	1,675	2,980	3,525	5,159	8,897[b]	13,420[b]	14,115[b]
Bonds	2,120	3,030	3,060	3,458	3,125	2,800	2,374
Debentures	435	770	1,545	2,569	3,124	3,443	3,262
Other Long-Term Debt	185	590	420	841	2,167	3,151	3,962
Total Long-Term Debt	2,740	4,390	5,025	6,868	8,415	9,394	9,599
Total Capitalization	4,415	7,370	8,550	12,027	17,312[b]	22,814[b]	23,713[b]
Current and Accrued Liabilities	500	1,005	1,200	1,974	3,802	6,069	8,367
Deferred Credits	25	10	65	147	295	715	524
Operating Reserves	40[e]	65	15	14	113	558	487
Contributions in Aid of Construction	5	15	20	14	0	0	1
Reserves for Deferred Income Taxes	e	230	390	341	2	5	18
Accumulated Deferred Income Taxes					957	1,431	1,906
Total Liabilities	4,985	8,695	10,240	14,517	22,480[b]	31,592[b]	35,016[b]

a. Data for prior years not directly comparable to later years due to reclassification of several companies from Integrated to Transmission. For definitions of companies, refer to Glossary.

b. Not comparable with 1970 and prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.

c. Includes "Capital Stock Discount and Expense" and "Reacquired Securities." Subsequent to 1955, "Reacquired Securities" are deducted from the appropriate capital account.

d. Includes accounts formerly detailed in "Premiums, Assessmeints, etc." and "Capital Surplus."

e. "Reserves For Deferred Income Taxes" and "Accumulated Deferred Income Taxes" included in "Operating Reserves."

TABLE 141

COMPOSITE BALANCE SHEET ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY INTEGRATED COMPANIES, 1973-1979

(Millions)

	1973	1974	1975	1976*	1977	1978	1979
ASSETS							
Total Gas Utility Plant	$10,264	$10,887	$10,960	$11,375	$11,881	$12,659	$13,551
Less Accum. Prov. for Depr. and Amort.	3,196	3,489	3,635	3,889	4,091	4,472	4,725
Net Gas Utility Plant (Total)	7,068	7,398	7,325	7,486	7,790	8,187	8,826
Investment and Fund Accounts	1,798	1,717	2,086	1,940	2,109	2,175	2,603
Current and Accrued Assets	1,448	1,649	1,899	2,034	2,223	2,623	3,558
Deferred Debits	132	156	177	244	228	304	384
Total Assets	10,446	10,920	11,487	11,704	12,350	13,289	15,370
LIABILITIES							
Common Stock	1,384	1,477	1,563	1,699	1,638	1,676^{R}	1,758
Retained Earnings	1,755	1,774	1,865	1,904	2,193	2,231	2,484
Other Paid-in Capital	520	514	567	606	626	818	825
Total Common Equity	3,659	3,765	3,995	4,209	4,457	4,726^{R}	5,067
Preferred Stock	221	213	254	227	330	418^{R}	448
Total Capital Stock	3,879	3,978	4,249	4,436	4,787	5,144	5,515
Bonds	1,760	1,809	1,850	2,072	1,887	1,714	1,667
Debentures	1,389	1,458	1,622	1,575	1,800	1,709	1,763
Other Long-Term Debt	1,136	1,086	962	834	708	849	1,163
Total Long-Term Debt	4,285	4,353	4,434	4,481	4,395	4,272	4,593
Total Capitalization	8,164	8,331	8,683	8,917	9,182	9,416	10,108
Current and Accrued Liabilities	1,534	1,838	1,991	1,902	2,213	2,678	3,852
Deferred Credits	205	178	173	228	246	328	328
Operating Reserves	40	57	63	65	91	142	146
Contributions in Aid of Construction	90	22	23	10	11	15	19
Reserves for Deferred Income Taxes	43	56	66	76	50	62	70
Accumulated Deferred Income Taxes	369	438	488	506	557	648^{R}	847
Total Liabilities	10,446	10,920	11,487	11,704	12,350	13,289	15,370

*Data not directly comparable to previous years due to company reclassification.
R—Revised

BALANCE SHEETS

TABLE 142
COMPOSITE BALANCE SHEET ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY COMBINATION COMPANIES, 1973-1979

(Millions)

	1973	1974	1975	1976	1977	1978	1979
ASSETS							
Gas Utility Plant	$ 8,794	$ 9,162	$ 9,526	$ 9,780	$10,186	$10,408	$11,340
Less Accum. Prov. for Depr. and Amort.	2,062	2,240	2,432	2,632	2,908	3,058	3,447
Net Gas Utility Plant (Total)	6,731	6,922	7,094	7,148	7,278	7,349	7,894
Electric Utility Plant	51,766	55,754	60,575	64,382	68,666	73,616	84,564
Less Accum. Prov. for Depr. and Amort.	10,308	11,050	12,193	13,156	14,223	15,531	17,898
Net Electric Utility Plant (Total)	41,457	44,704	48,382	51,226	54,443	58,084	66,666
Other	1,935	2,118	2,142	2,299	2,260	2,401	2,770
Less Accum. Prov. for Depr. and Amort.	481	528	575	639	644	690	797
Net Other (Total)	1,454	1,591	1,567	1,660	1,616	1,711	1,974
Investment and Fund Accounts	554	709	741	835	1,219	1,499	1,944
Current and Accrued Assets	3,474	5,154	6,107	7,159	7,924	8,305	10,109
Deferred Debits	525	746	830	849	972	1,001	1,715
Total Assets	54,196	59,825	64,721	68,877	73,452	77,949	90,301
LIABILITIES							
Common Stock	8,359	8,621	9,146	9,826	9,726	10,309	12,360
Retained Earnings	6,024	6,434	7,016	7,600	8,277	8,925	9,807
Other Paid-in Capital	2,127	2,695	3,598	3,967	5,031	5,593	5,932
Total Common Equity	16,510	17,750	19,760	21,393	23,034	24,826	28,098
Preferred Stock	6,152	6,814	7,541	7,993	8,403	8,765	9,739
Total Capital Stock	22,662	24,564	27,301	29,386	31,437	33,592	37,837
Bonds	22,669	24,331	26,562	27,435	27,933	28,561	31,252
Debentures	923	912	925	844	743	773	1,025
Other Long-Term Debts	905	1,196	1,393	1,280	1,853	2,392	3,186
Total Long-Term Debts	24,497	26,439	28,880	29,559	30,529	31,726	35,464
Total Capitalization	47,159	51,003	56,181	58,945	61,966	65,318	73,301
Current and Accrued Liabilities	5,074	6,795	5,783	6,265	7,055	7,505	10,517
Deferred Credits	556	678	985	1,526	1,931	2,288	2,970
Operating Reserves	50	49	50	47	45	57	81
Contributions in Aid of Construction	311	26	63	57	19	20	26
Reserves for Deferred Income Taxes	214	205	233	275	535	475	529
Accumulated Deferred Income Taxes	832	1,069	1,426	1,762	1,901	2,286	2,878
Total Liabilities	54,196	59,825	64,721	68,877	73,452	77,949	90,301

TABLE 143
TOTAL GAS UTILITY INDUSTRY PLANT, BY TYPE OF COMPANY AND BY PLANT FUNCTION, 1955-1979

(Millions)

	1955	1960	1965	1970	1975	1978	1979
Total Industry							
Total Gas Utility Plant	$13,750	$21,525	$29,175	$39,914	$51,004	$60,787	$64,474
Production	1,92[illegible]	2,925	3,180	3,657	4,776	6,423	7,072
Underground Storage	395	755	1,200	1,816	2,697	3,818	3,963
Other Storage	a	a	a	a	700	863	753
LNG	c	c	c	c	c	c	331
Transmission	5,960	9,410	12,435	17,188	20,530	23,391	23,265
Distribution	4,625	7,275	10,660	15,056	19,151	22,465	24,061
General and Intangible[b]	575	835	1,090	1,518	2,226	2,321	3,242
Construction Work in Progress	275	325	610	679	924	1,006	1,787
Total Invester-Owned Industry							
Total Gas Utility Plant	$13,305	$20,835	$28,205	$38,541	$49,384	$59,032	62,710
Production	1,835	2,835	3,055	3,529	4,687	6,419	6,850
Underground Storage	395	755	1,190	1,770	2,639	3,778	3,960
Other Storage	a	a	a	a	648	805	640
LNG	c	c	c	c	c	c	320
Transmission	5,960	9,405	12,425	17,170	20,307	23,915	24,556
Distribution	4,310	6,750	9,935	13,989	18,080	20,473	22,044
General and Intangible[b]	545	785	1,020	1,451	2,125	2,683	3,114
Construction Work in Progress	260	305	580	632	896	959	1,227
Distribution Companies							
Total Gas Utility Plant	c	c	c	c	$8,547	$9,619	10,166
Production	c	c	c	c	387	493	521
Underground Storage	c	c	c	c	460	556	489
Other Storage	c	c	c	c	172	228	231
LNG	c	c	c	c	c	c	84
Transmission	c	c	c	c	425	292	311
Distribution	c	c	c	c	6,452	7,465	7,892
General and Intangible[b]	c	c	c	c	479	521	555
Construction Work in Progress	c	c	c	c	173	64	83
Transmission Companies							
Total Gas Utility Plant	$5,190	$8,960	$11,505	$16,363	$20,351	$26,347	27,653
Production	635	1,430	1,570	1,842	2,650	3,771	4,303
Underground Storage	125	280	325	668	1,299	1,956	2,057
Other Storage	a	a	a	a	113	291	114
LNG	c	c	c	c	c	c	218
Transmission	4,155	6,880	9,040	13,238	15,322	18,868	19,218
Distribution	25	35	5	2	5	4	4
General and Intangible[b]	135	220	260	330	587	887	1,003
Construction Work in Progress	115	115	305	283	375	570	736
Integrated Companies							
Total Gas Utility Plant	c	c	c	c	$10,960	$12,659	$13,551
Production	c	c	c	c	1,240	1,462	1,532
Underground Storage	c	c	c	c	531	844	952
Other Storage	c	c	c	c	62	115	116
LNG	c	c	c	c	c	c	9
Transmission	c	c	c	c	3,418	3,466	3,606
Distribution	c	c	c	c	4,809	5,620	6,042
General and Intangible[b]	c	c	c	c	748	954	1,058
Construction Work in Progress	c	c	c	c	151	198	235
Combination Companies							
Total Gas Utility Plant	c	c	c	c	$9,526	$10,408	11,340
Production	c	c	c	c	410	691	494
Underground Storage	c	c	c	c	348	422	462
Other Storage	c	c	c	c	301	170	179
LNG	c	c	c	c	c	c	8
Transmission	c	c	c	c	1,144	1,290	1,421
Distribution	c	c	c	c	6,816	7,384	8,106
General and Intangible[b]	c	c	c	c	310	321	497
Construction Work in Progress	c	c	c	c	197	130	173

a. Included in "Production."
b. Includes plant acquisition adjustments and plant adjustments.
c. Not available.

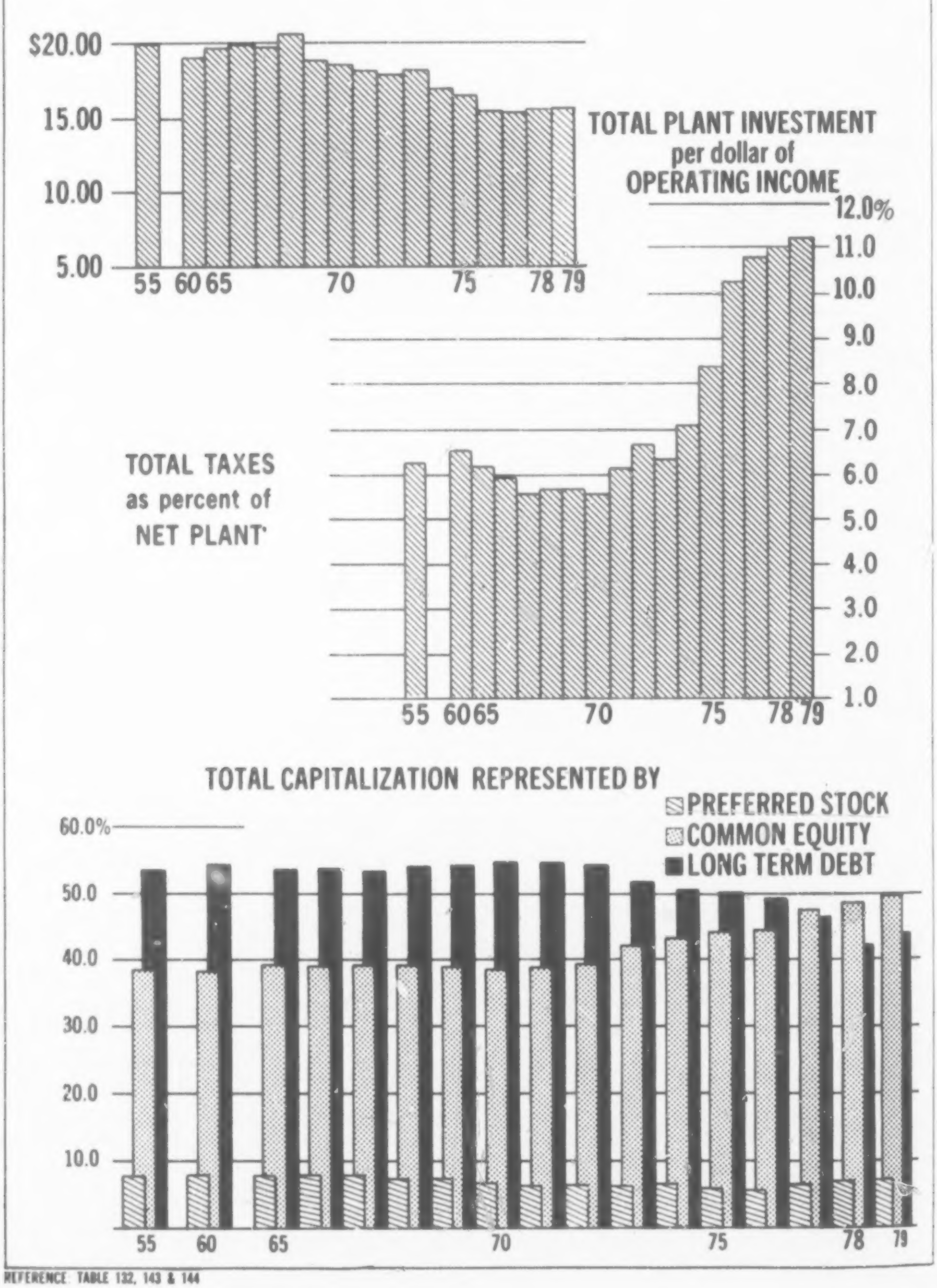
SECTION XII
FINANCE
PART 4. ANALYTICAL RATIOS

	1979
Capitalization Represented by (%)	
Long-term Debt	43.7
Preferred Stock	7.0
Common Equity	49.3

CHART 22

GAS UTILITY INDUSTRY FINANCIAL RATIOS

(INVESTOR-OWNED)



REFERENCE: TABLE 132, 143 & 144

TABLE 144
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TOTAL INDUSTRY, 1955–1979

	1955	1960	1965	1970	1975	1978	1979
Earnings							
Utility Operating Income as % of Total Plant	5.1	5.5	5.3	5.6	6.5	6.7	6.9
Utility Operating Income as % of Net Plant	6.5	7.0	7.2	7.8	9.9	10.9	11.2
Operating Revenue as % of Total Plant	38.1	41.7	40.9	42.5	61.9	89.8	106.7
Common Dividend Payout Ratio	71.6	67.3	68.3	67.6	57.2[a]	58.4[a]	53.2[a]
Return on Common Equity	10.9	11.8	12.2	11.8	13.7[a]	14.2[a]	16.5[a]
Return on Average Common Equity	11.2	12.2	12.5	12.2	14.3	14.7	17.1
Return on Net Plant	4.4	4.7	4.9	4.7	7.1	8.8	10.3
Pretax Coverage of:							
Total Interest Expense	6.3	5.5	5.3	3.9	4.2	4.9	4.9
Long-Term Debt Interest Expense	7.0	6.0	5.8	4.5	4.7	5.6	6.0
Allowance for Funds Used During Construction as % of Net Income	2.9	3.0	3.1	5.1	5.2	5.8	5.7
Expenses							
Operating Expenses as % of Operating Revenue	86.9	87.2	87.3	87.3	90.0	93.0	94.0
Maintenance Expenses as % of Total Plant	1.4	1.3	1.1	1.1	1.4	1.6	1.8
Depreciation Expenses as % of Total Plant	2.6	2.8	2.8	2.9	3.6	3.2	3.7
Depreciation Expenses as % of Depreciable Plant	b	b	b	b	3.6	3.9	4.3
Total Taxes as % of Total Plant	5.0	5.1	4.6	4.1	5.6	6.7	6.9
Total Taxes as % of Net Plant	6.3	6.5	6.2	5.6	8.5	11.0	11.[illegible]
Total Taxes as % of Net Income plus Total Taxes	56.7	56.0	52.4	52.5	53.9[a]	53.6[a]	50.5[a]
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[c]	44.6	39.4	36.4	29.8	30.4[a]	33.0[a]	21.6[a]
Plant							
Total Plant per $ of Total Operating Revenue	2.6	2.4	2.4	2.4	1.6	1.1	1.0
Net Plant per $ of Total Operating Revenue	2.1	1.9	1.8	1.7	1.1	0.7	0.6
Depreciation Reserve as % of Total Plant	20.9	21.9	25.5	27.8	34.0	38.7	38.9
Depreciation Reserve as % of Depreciable Plant	b	b	b	b	35.8	41.0	41.0
Total Plant per Employee ($000)	68.8	100.9	137.1	182.1	251.6	297.1	29[illegible].2
Capitalization							
Long-term Debt as % of Net Plant	56.0	56.1	54.8	56.3	59.4	56.0	54.9
% Total Capitalization Represented by:							
a. Long-term Debt	53.4	53.9	53.5	54.7	50.1	44.2	43.7
b. Preferred Stock	7.8	7.9	7.2	6.8	6.5	7.0	7.0
c. Common Equity	38.8	38.2	39.3	38.5	43.4	48.8	49.3
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	b	b	b	b	53.8	66.3	61.0
b. Equity Issues	b	b	b	b	11.9	6.5	7.4
c. Debt Issues	b	b	b	b	34.3	27.[illegible]	31.6

a. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.

b. Not available.

c. Includes "Investment Tax Credit Adjustment" Prior to 1956, also includes "Provisions for Deferred Federal Income Taxes" and "portion of Current Federal Income Taxes Provided For in Prior Years."

TABLE 145

SELECTED COMPOSITE ANALYTICAL RATIOS INVESTOR-OWNED GAS UTILITY INDUSTRY DISTRIBUTION COMPANIES, 1973-1979

	1973	1974	1975	1976[a]	1977	1978	1979
Earnings							
Utility Operating Income as % of Total Plant	5.8	6.1	6.3	6.4	6.8	6.9	7.5
Utility Operating Income as % of Net Plant	7.5	8.0	8.4	8.7	9.2	9.6	10.4
Operating Revenue as % of Total Plant	55.2	60.4	69.5	81.8	95.1	103.3	115.7
Common Dividend Payout Ratio	75.9	74.7	71.6	68.6	68.7	66.7	67.8
Return on Common Equity	10.8	11.2	11.4	11.9	13.6	13.9	15.5
Return on Average Common Equity	11.1	11.3	13.5	11.9	13.8	14.3	16.1
Return on Net Plant	4.3	4.4	4.6	4.7	5.6	5.9	6.8
Pretax Interest Coverage of:							
Total Interest Expense	5.1	4.7	5.0	5.3	6.2	6.4	6.2
Long-Term Debt Interest Expense	5.6	5.6	5.6	5.8	6.8	7.3	7.4
Allowance for Funds Used During Construction as % of Net Income	3.0	4.5	2.5	2.0	0.8	0.7	1.0
Expenses							
Operating Expenses as % of Operating Revenue	89.8	90.2	91.1	92.3	92.9	93.4	93.6
Maintenance Expenses as % of Total Plant	1.7	1.8	1.9	2.0	2.3	2.2	2.3
Depreciation Expenses as % of Total Plant	2.6	2.7	2.9	2.9	3.1	3.1	3.1
Depreciation Expenses as % of Depreciable Plant	2.6	2.7	2.9	3.0	3.1	3.2	3.2
Total Taxes as % of Total Plant	6.7	6.9	7.8	8.2	9.8	10.4	10.4
Total Taxes as % of Net Plant	8.7	9.0	10.3	11.1	13.5	14.4	14.5
Total Taxes as % of Net Income plus Total Taxes	65.6	65.8	67.7	68.5	69.3	69.8	67.1
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	32.3	29.9	31.1	33.8	37.6	36.8	31.8
Plant							
Total Plant per $ of Total Operating Revenue	1.8	1.7	1.4	1.2	1.1	1.0	0.9
Net Plant per $ of Total Operating Revenue	1.4	1.3	1.1	0.9	0.8	0.7	0.6
Depreciation Reserve as % of Total Plant	22.8	23.4	24.3	25.8	26.9	28.0	28.5
Depreciation Reserve as % of Depreciable Plant	23.5	24.3	25.4	26.6	27.2	28.8	29.4
Total Plant per Employee ($000)	143.7	154.4	166.6	173.7	181.2	189.7	200.1
Capitalization							
Long-term Debt as % of Net Plant	46.7	45.3	47.5	49.6	49.9	44.1	42.9
% Total Capitalization Represented by:							
a. Long-term Debt	51.2	50.7	51.2	52.1	50.0	48.1	46.9
b. Preferred Stock	5.5	5.7	5.5	5.5	4.9	5.6	5.7
c. Common Equity	43.3	43.6	43.3	42.4	45.2	46.3	47.7
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	c	c	54.0	59.1	81.5	71.0	61.3
b. Equity Issues	c	c	14.3	7.2	1.1	5.3	18.1
c. Debt Issues	c	c	31.7	33.7	17.3	23.6	20.6

a. Data not directly comparable to previous years due to company reclassification.
b. Includes "Investment Tax Credit Adjustment."
c. Not available

TABLE 146
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TRANSMISSION COMPANIES, 1955-1979

	1955	1960	1965	1970[a]	1975	1978	1979
Earnings							
Utility Operating Income as % of Total Plant	5.6	5.6	4.9	5.3	6.8	6.8	7.1
Utility Operating Income as % of Net Plant	7.0	7.3	7.0	7.8	11.7	13.1	13.7
Operating Revenue as % of Total Plant	31.9	35.6	35.5	36.2	58.5	87.2	108.2
Common Dividend Payout Ratio	65.4	64.8	75.9	72.5	50.9[b]	56.0[b]	50.3[b]
Return on Common Equity	13.9	12.1	12.1	11.7	14.9[b]	15.0[b]	17.7[b]
Return on Average Common Equity	14.9	12.7	12.3	12.1	15.8	15.5	18.2
Return of Net Plant	4.3	4.1	4.2	4.4	10.1	13.0	15.7
Pretax Coverage of:							
Total Interest Expense	4.7	3.9	3.8	2.9	4.0	4.7	4.6
Long-Term Debt Interest Expense	5.0	4.3	4.1	3.3	4.5	5.5	5.9
Allowance for Funds Used During Construction of % of Net Income	4.0	3.5	4.8	4.3	3.0	4.3	3.6
Expenses							
Operating Expenses as % of Operating Revenue	82.8	84.6	86.5	85.8	88.8	92.6	93.7
Maintenance Expenses as % of Total Plant	0.8	0.7	0.7	0.7	0.9	1.1	1.2
Depreciation Expenses as % of Total Plant	3.1	3.2	3.1	3.1	4.4	4.4	4.3
Depreciation Expenses as % of Depreciable Plant	c	c	c	c	4.4	4.7	5.2
Total Taxes as % of Total Plant	3.7	3.6	3.1	2.3	5.0	5.6	5.8
Total Taxes as % of Net Plant	4.6	4.6	4.4	3.4	8.6	10.8	11.1
Total Taxes as % of Net Income plus Total Taxes	49.0	50.2	48.4	40.0	44.6[b]	43.8[b]	40.4[b]
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[d]	41.2	34.0	35.9	26.2	35.6[b]	34.9[b]	21.9[b]
Plant							
Total Plant per $ of Total Operating Revenue	3.1	2.8	2.8	2.8	1.7	1.1	0.9
Net Plant per $ of Total Operating Revenue	2.5	2.2	2.0	1.9	1.0	0.6	0.5
Depreciation Reserve as % of Total Plant	19.0	22.8	29.3	32.5	42.4	48.0	48.2
Depreciation Reserve as % of Depreciable Plant	c	c	c	c	43.8	51.7	58.3
Total Plant per Employee ($000)	c	285.4	388.7	505.0	547.1	622.9	652.2
Capitalization							
Long-term Debt as % of Net Plant	65.2	63.4	61.8	62.1	71.8	68.5	67.0
% Total Capitalization Represented by:							
a. Long-term Debt	62.1	59.6	58.8	57.1	48.6	41.2	40.5
b. Preferred Stock	8.3	8.7	8.4	8.5	5.8	6.8	6.4
c. Common Equity	29.7	31.8	32.9	34.4	45.5	52.1	53.1
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	c	c	c	c	[illegible]	72.4	66.1
b. Equity Issues	c	c	c	c	[illegible]	1.3	10.6
c. Debt Issues	c	c	c	c	40.9	26.3	23.3

a. Data for 1970 and prior years not directly comparable to subsequent years due to reclassification of several companies from Integrated to Transmission. For definitions to companies, refer to Glossary.

b. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.

c. Not available.

d. Includes "Investment Tax Credit Adjustment." Prior to 1956, also includes "Provision for Deferred Federal Income Taxes" and "Portion of Current Federal Income Taxes Provided For in Prior Years."

TABLE 147
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
INTEGRATED COMPANIES, 1973-1979

	1973	1974	1975	1976[a]	1977	1978	1979
Earnings							
Utility Operating Income as % of Total Plant	6.0	6.2	6.4	5.6	6.3	5.9	5.6
Utility Operating Income as % of Net Plant	8.7	9.1	9.6	8.5	9.6	9.1	8.6
Operating Revenue as % of Total Plant	45.5	51.7	63.5	71.2	82.5	89.0	106.5
Common Dividend Payout Ratio	71.7	54.3	60.6	74.4	57.2	64.7	50.8
Return on Common Equity	11.7	13.7	13.9	12.9	13.8	12.0R	15.2
Return on Average Common Equity	12.2	13.8	14.3	13.2	14.2	12.3R	15.8
Return on Net Plant	6.1	6.9	7.6	7.2	7.9	6.9	8.7
Pretax Coverage of:							
Total Interest Expense	3.8	3.8	4.2	4.3	4.7	4.4	4.6
Long-Term Debt Interest Expense	4.2	4.3	4.6	4.6	5.1	5.2	5.8
Allowance for Funds Used During Construction as % of Net Income	2.3	1.5	1.7	1.6	1.2	1.7	1.5
Expenses							
Operating Expenses as % of Operating Revenue	87.2	88.4	90.2	92.2	92.6	93.6	94.9
Maintenance Expenses as % of Total Plant	1.2	1.3	1.4	1.6	1.8	1.8	2.0
Depreciation Expenses as % of Total Plant	2.9	3.0	3.1	3.1	3.1	3.2	3.4
Depreciation Expenses as % of Depreciable Plant	2.4	3.1	3.2	3.3	3.2	3.5	3.7
Total Taxes as % of Total Plant	4.3	4.5	5.3	5.8	6.1	5.9	6.3
Total Taxes as % of Net Plant	6.3	6.6	7.9	8.9	9.3	9.2	9.7
Total Taxes as % of Net Income plus Total Taxes	50.1	47.9	50.2	54.1	52.6	55.6	51.5
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	24.1	22.1	27.3	31.2	29.6	27.6	7.0
Plant							
Total Plant per $ of Total Operating Revenue	2.2	1.9	1.6	1.5	1.2	1.1	0.9
Net Plant per $ of Total Operating Revenue	1.5	1.3	1.1	1.0	0.8	0.7	0.6
Depreciation Reserve as % of Total Plant	31.1	32.0	33.2	34.2	34.4	35.3	34.9
Depreciation Reserve as % of Depreciable Plant	26.1	34.6	35.9	36.5	35.0	38.2	38.1
Total Plant per Employee ($000)	180.7	189.3	197.8	209.5	211.4	223.7	239.4
Capitalization							
Long-term Debt as % of Net Plant	60.6	58.8	60.5	[illegible]9.8	56.4	52.2	52.0
% Total Capitalization Represented by:							
a. Long-term Debt	52.5	52.3	51.1	50.2	47.9	45.4	45.4
b. Preferred Stock	2.7	2.6	2.9	2.6	3.6	4.4R	4.4
c. Common Equity	44.8	45.2	46.0	47.2	48.5	50.2R	50.1
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	c	c	59.7	45.9	66.3	63.4	74.9
b. Equity Issues	c	c	8.7	28.0	7.2	2.9	1.3
c. Debt Issues	c	c	31.6	26.1	26.5	33.7	23.8

a. Data not directly comparable to previous years due to company reclassification.
b. Includes "Investment Tax Credit Adjustment."
c. Not available.
R—Revised.

TABLE 148
SELECTED COMPOSITE ANALYTICAL RATIOS INVESTOR-OWNED GAS UTILITY INDUSTRY COMBINATION COMPANIES, 1973-1979

	1973	1974	1975	1976	1977	1978	1979
Earnings							
Utility Operating Income as % of Total Plant	5.9	6.3	6.3	6.5	5.7	6.2	6.0
Utility Operating Income as % of Net Plant	7.7	8.3	8.4	8.8	8.0	8.7	8.5
Operating Revenue as % of Total Plant	45.0	50.3	60.4	71.8	78.2	84.6	95.3
Common Dividend Payout Ratio	58.8	54.1	61.0	47.5	64.5	52.5	52.4
Return on Common Equity	11.9	12.6	11.3	15.6	11.8	11.6	14.4
Return on Average Common Equity	a	a	12.1	15.9	12.1	13.2	15.2
Return on Net Plant	a	4.4	4.1	5.6	4.4	4.1	5.4
Pretax Interest Coverage:							
Total Interest Expense	a	4.2	4.2	5.3	4.8	5.0	5.5
Long-Term Debt Interest Expense	a	4.7	4.5	5.5	5.0	5.3	5.9
Allowance for Funds Used During Construction as % of Net Income	a	20.6	21.1	16.6	14.6	20.1	20.7
Expenses							
Operating Expenses as % of Operating Revenue	88.7	89.0	90.9	91.0	92.7	92.7	93.8
Maintenance Expenses as % of Total Plant	2.0	2.0	2.0	2.1	2.3	2.2	2.3
Depreciation Expenses as % of Total Plant	2.6	2.7	2.9	3.0	3.1	3.1	3.1
Depreciation Expenses as % of Depreciable Plant	2.8	2.9	3.0	3.1	3.1	3.1	3.1
Total Taxes as % of Total Plant	4.7	4.7	5.3	6.8	6.5	7.1	7.0
Total Taxes as % of Net Plant	6.1	6.3	7.1	9.4	9.0	10.9	10.0
Total Taxes as % of Net Income plus Total Taxes	56.5	54.7	58.8	58.8	62.8	59.7	61.2
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	16.6	24.1	10.8	27.5	17.8	27.7	26.9
Plant							
Total Plant per $ of Total Operating Revenue	2.2	2.0	1.7	1.4	1.3	1.2	1.0
Net Plant per $ of Total Operating Revenue	1.7	1.5	1.2	1.0	0.9	0.8	0.7
Depreciation Reserve as % of Total Plant	23.4	24.4	25.5	26.9	28.6	29.4	30.4
Depreciation Reserve as % of Depreciable Plant	25.3	26.3	27.3	27.9	28.9	29.9	31.0
Total Plant per Employee ($000)	157.3	166.6	181.8	193.3	200.5	212.0	215.6
All Operations							
Earnings							
Utility Operating Income as % of Total Plant	5.4	5.7	6.1	6.3	6.3	6.3	6.3
Utility Operating Income as % of Net Plant	6.8	7.2	7.8	8.0	8.0	8.1	8.1
Operating Revenue as % of Total Plant	24.7	28.5	31.6	33.3	35.5	35.5	36.7
Common Dividend Payout Ratio	67.3	67.5	66.9	64.7	66.1	68.6	72.6
Return on Common Equity	10.4	9.8	10.2	10.8	10.7	10.7	10.7
Return on Average Common Equity	11.1	10.2	10.0	10.5	11.1	11.1	11.4
Return on Net Plant	3.5	3.3	3.5	3.8	3.9	4.0	4.0
Pretax Interest Coverage of:							
Total Interest Expense	3.9	3.5	3.7	4.0	4.1	4.1	3.8
Long-Term Debt Interest Expense	4.2	3.9	3.9	4.2	4.3	4.3	4.1
Allowance for Funds Used During Construction as % of Net Income	26.8	28.5	25.0	23.2	25.4	26.9	33.1
Expenses							
Operating Expenses as % of Operating Revenue	81.2	83.2	83.3	83.9	85.0	85.2	86.3
Maintenance Expenses as % of Total Plant	1.6	1.6	1.7	1.7	1.9	1.9	2.1
Depreciation Expenses as % of Total Plant	2.3	2.3	2.4	2.4	2.4	2.3	2.4
Depreciation Expenses as % of Depreciable Plant	2.8	2.5	2.6	3.0	3.0	3.2	3.3
Total Taxes as % of Total Plant	3.8	3.6	4.2	4.6	4.7	4.7	4.3
Total Taxes as % of Net Plant	4.7	4.5	5.3	5.9	6.0	6.0	5.6
Total Taxes as % of Net Income plus Total Taxes	52.2	52.7	54.7	55.2	55.4	55.2	53.4
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	14.6	8.1	15.6	20.4	21.4	21.4	15.6
Plant							
Total Plant per $ of Total Operating Revenue	4.0	3.5	3.2	3.0	2.8	2.8	2.7
Net Plant per $ of Total Operating Revenue	3.2	2.8	2.5	2.4	2.2	2.2	2.1
Depreciation Reserve as % of Total Plant	20.6	20.6	21.0	21.5	21.9	22.3	22.4
Depreciation Reserve as % of Depreciable Plant	25.4	22.4	23.0	26.5	26.8	26.6	26.8
Capitalization							
Long-term Debt as % of Net Plant	49.3	49.7	50.6	49.2	48.2	47.2	46.3
% Total Capitalization represented by:							
a. Long-term Debt	51.9	51.8	51.4	50.1	49.3	48.6	48.4
b. Preferred Stock	13.0	13.4	13.4	13.6	13.6	13.4	13.3
c. Common Equity	35.0	34.8	35.2	36.3	37.2	38.0	38.3
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	a	a	45.9	48.4	57.3	50.0	24.7
b. Equity Issues	a	a	28.0	26.8	31.5	23.9	3.0
c. Debt Issues	a	a	26.1	24.8	11.2	26.1	72.3

a. Not available.

b. Includes "Investment Tax Credit Adjustment."

TABLE 149

SELECTED ANALYTICAL RATIOS RELATING TO INVESTOR-OWNED GAS UTILITY INDUSTRY OPERATING AND MAINTENANCE EXPENSES, 1970-1979[a]

	Total Operating and Maintenance Expense per Therm of Sales (cents)					Total Operating Revenue per Therm of Sales (cents)				
Type of Activity	1970	1975	1977	1978	1979	1970	1975	1977	1978	1979
Natural Gas Distribution[b]	5.85	11.53	18.13	19.45	23.10	8.46	15.12	22.68	24.17	27.97
Natural Gas Transmission	2.44	6.07	11.14	12.96	16.03	3.45	8.35	14.10	15.98	18.99

	Transmission and Distribution Expense per Mile of Pipe (dollars)					Total Cost of Purchases and Production as Percent of Total Operating and Maintenance Expense				
Type of Activity	1970	1975	1977	1978	1979	1970	1975	1977	1978	1979
Natural Gas Distribution[b]	1,423.97	1,904.73	2,201.78	2,249.76	2,703.18	69.30	77.74	82.03	83.54	84.19
Natural Gas Transmission	2,398.21	2,398.21	5,900.13	6,773.58	9,396.77	89.00	86.09	88.68	83.92	88.35

	Customer Accounts Expense Per Customer (dollars)					Total Payroll as Percent of Total Operating and Maintenance Expense				
Type of Activity	1970	1975	1977	1978	1979	1970	1975	1977	1978	1979
Natural Gas Distribution[b]	8.06	13.90	17.91	18.39	18.26	19.18	14.97	11.64	11.41	10.44
Natural Gas Transmission						7.41	5.99	4.84	4.58	3.75

	Gross Sales Expense per Customer (dollars)				
Type of Activity	1970	1975	1977	1978	1979
Straight Natural Gas Distribution	6.56	2.90	2.47	2.98	2.80
Combination Natural Gas Distribution	4.01	1.16	1.41	1.40	0.53

a. Integrated companies excluded.
b. Includes both straight gas and combination companies.

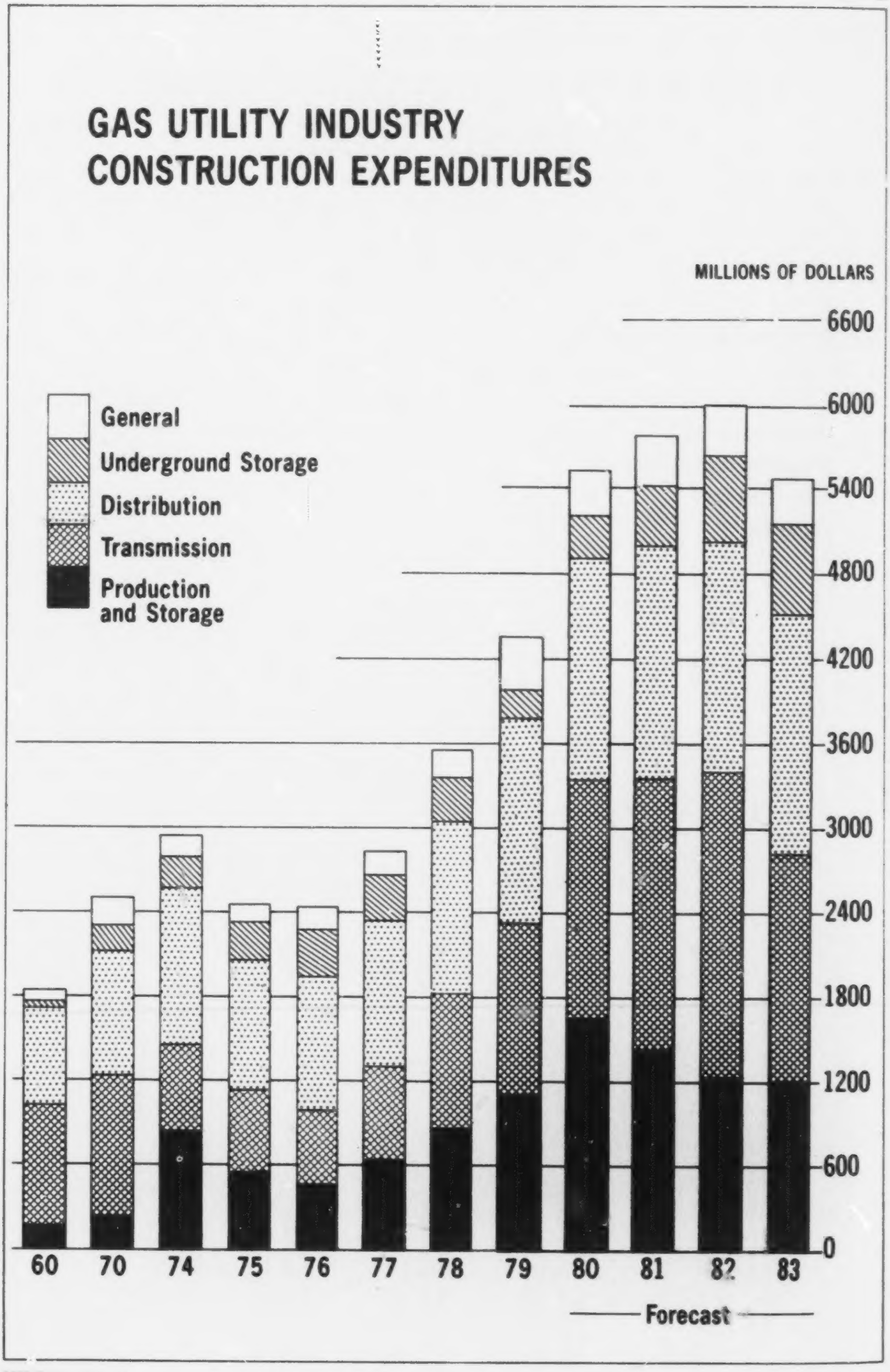
SECTION XII

FINANCE

PART 5. CONSTRUCTION EXPENDITURES

	1979	% Change 79/78
Construction Expenditures		
Total	4,366	+21.9
Production & Storage	1,125	+27.7
Transmission	1,226	+31.1
Underground Storage	281	−12.5
Distribution	1,448	+17.9
General	286	+33.0

CHART 23



REFERENCE: TABLE 150

CONSTRUCTION EXPENDITURES

TABLE 150
GAS UTILITY INDUSTRY CONSTRUCTION EXPENDITURES, BY TYPE OF FACILITY, 1955-1983

(Millions)

Year	Total	Production and Storage	Transmission	Underground Storage	Distribution	General
1955	$1,345	$ 138	$ 593	$ 60	$ 500	$ 54
1956	1,552	188	704	50	534	76
1957	1,772	281	753	68	593	77
1958	1,618	218	715	73	541	71
1959	1,728	227	694	79	643	85
1960	1,845	157	848	59	696	85
1961	1,662	172	654	55	687	94
1962	1,673	177	613	53	708	122
1963	1,558	138	461	106	752	101
1964	1,701	120	616	84	784	97
1965	1,935	156	770	69	824	116
1966	2,374	182	1,038	151	869	134
1967	2,252	186	1,006	91	848	121
1968	2,972	259	1,577	88	913	135
1969	2,686	83	1,511	128	863	101
1970	2,507	203	1,019	167	913	205
1971	2,419	340	842	171	888	178
1972	2,822	717	678	177	1,081	169
1973	2,966	771	746	201	1,094	155
1974	2,965	830	632	230	1,097	176
1975	2,466	555	590	276	910	136
1976	2,425	466	531	362	926	140
1977	2,833	620	670	323	1,048	172
1978	3,581	881	935	321	1,228	215
1979	4,366	1,125	1,226	281	1,448	286
1980 (forecast)	5,562	1,688	1,710	328	1,504	333
1981 (forecast)	5,808	1,467	1,937	409	1,624	372
1982 (forecast)	6,008	1,248	2,188	633	1,607	332
1983 (forecast)	5,490	1,236	1,629	638	1,694	293

TABLE 151
GAS UTILITY INDUSTRY CONSTRUCTION EXPENDITURES, BY TYPE OF FACILITY, 1976-1979

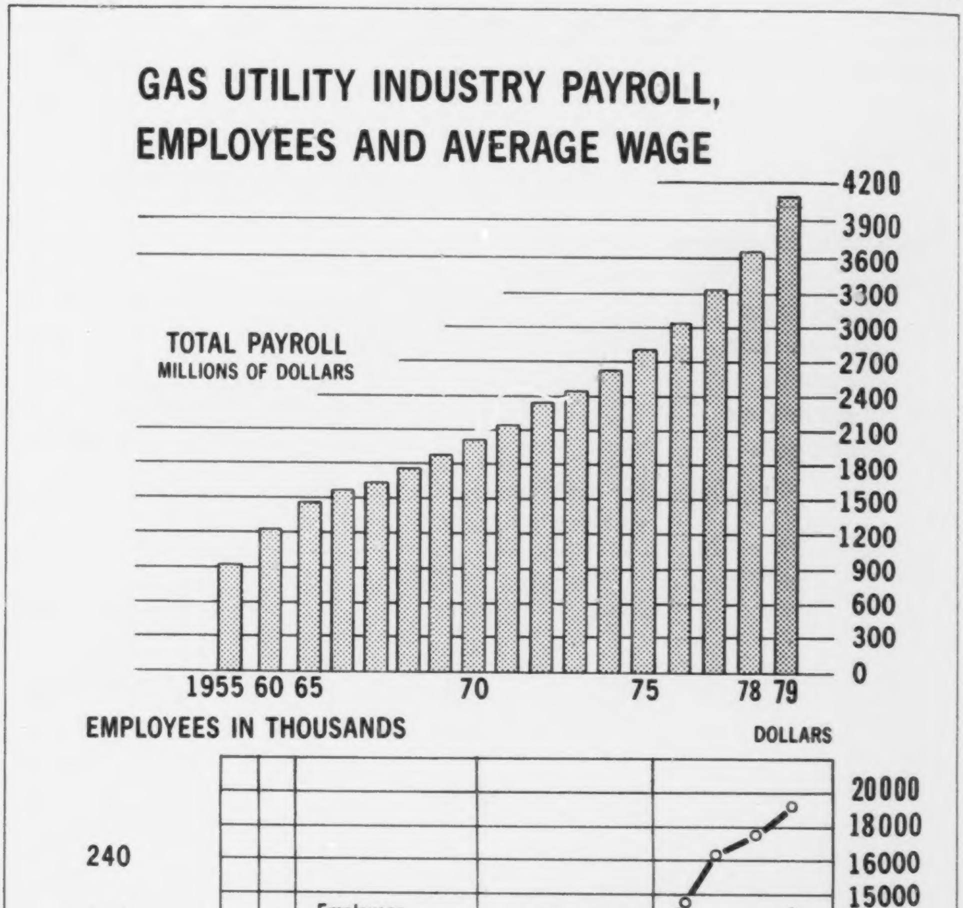
	1976	1977	1978	1979
Production and Storage	100.0%	100.0%	100.0%	100.0%
SNG Plant	8.1	2.1	8.6	0.6
LNG Plant	0.2	a	a	a
Propane Plant	0.2	1.5	0.8	2.2
Exploration and Drilling	28.6	28.2	21.8	29.1
Other[b]	48.5	55.7	62.1	64.1
LNG Storage	13.6	11.9	4.1	2.6
Other Storage	0.6	0.6	2.6	1.4
LNG Ships	c	a	a	0.0
Transmission	100.0%	100.0%	100.0%	100.0%
New and Replacement	71.2	74.2	77.6	68.7
Compressor Stations	18.6	21.6	16.4	26.0
Other	10.2	4.2	6.0	5.2
Distribution	100.0%	100.0%	100.0%	100.0%
New and Replacement	86.2	80.3	88.1	88.7
Compressor Stations	0.1	5.2	a	1.4
Other	13.7	14.5	11.9	9.9

a. Less than 0.1 percent.
b. Includes gathering.
c. Data not available prior to 1977.

SECTION XIII
PERSONNEL DATA

	1979	% Change 79/78
Gas Utility Employees (Thousands)		
Total	214.6	+2.3
Distribution	50.8	+0.2
Transmission	42.4	+0.3
Integrated	56.6	+0.0
Combination	52.6	+7.1
Municipals	12.2	+9.9

CHART 24



REFERENCE: TABLE 152

PERSONNEL DATA

TABLE 152
GAS UTILITY INDUSTRY EMPLOYEES AND PAYROLL, 1955-1979

Year	Average Number of Employees (Thousands)	Total Payroll (Thousands)	Average Wage per Employee
1955	193.5	$ 904,103	$ 4,670
1956	201.0	984,472	4,900
1957	201.6	1,034,003	5,130
1958	202.5	1,096,553	5,420
1959	204.9	1,166,156	5,690
1960	206.4	1,214,565	5,880
1961	206.1	1,268,437	6,150
1962	204.4	1,316,057	6,440
1963	204.5	1,377,729	6,740
1964	204.8	1,420,754	6,940
1965	205.7	1,480,397	7,200
1966	207.4	1,556,577	7,500
1967	207.2	1,640,397	7,920
1968	208.6	1,759,784	8,440
1969	210.2	1,890,490	8,990
1970	211.7	2,021,197	9,550
1971	213.7	2,142,892	10,028
1972	215.4	2,321,932	10,780
1973	215.2	2,449,075	11,381
1974	213.4	2,606,903	12,216
1975	207.6	2,817,150	13,570
1976	205.1	3,044,605	14,844
1977	208.8	3,371,856	16,149
1978	209.8	3,647,057	17,383
1979	214.6	4,134,270	19,265

TABLE 153
GAS UTILITY INDUSTRY EMPLOYEES AND PAYROLL BY TYPE OF PAYROLL AND TYPE OF COMPANY, 1955-1979

(Thousands)

	1955	1960	1965	1970	1975	1978	1979
Total							
Employees	193.5	206.4	205.7	211.7	207.6	209.8	214.6
Payroll—Total	$904,103	$1,214,565	$1,480,397	$2,021,197	$2,817,150	$3,647,057	$4,134,270
Operating	683,767	914,438	1,146,226	1,606,321	2,292,448	2,950,302	3,335,477
Construction	160,180	209,082	262,792	325,546	380,835	475,334	556,064
Miscellaneous	60,156	62,045	71,379	89,330	143,867	221,422	242,728
Investor Owned—Total							
Employees	*	*	*	*	196.3	198.7	202.4
Payroll—Total	*	*	*	*	$2,675,092	$3,514,930	$3,929,210
Operating	*	*	*	*	2,184,446	2,852,454	3,168,049
Construction	*	*	*	*	357,221	453,958	525,934
Miscellaneous	*	*	*	*	133,425	208,518	235,226
Distribution							
Employees	*	*	*	*	51.3	50.7	50.8
Payroll—Total	*	*	*	*	$697,552	$860,257	938,491
Operating	*	*	*	*	567,947	695,582	753,893
Construction	*	*	*	*	98,257	117,351	135,581
Miscellaneous	*	*	*	*	31,348	47,323	49,017
Transmission							
Employees	*	31.4	29.6	32.4	37.2	42.3	42.4
Payroll—Total	*	$199,701	$228,493	$331,955	$574,275	$854,487	947,175
Operating	*	166,064	187,521	266,685	470,418	681,740	751,176
Construction	*	21,955	30,650	44,869	53,832	79,636	89,903
Miscellaneous	*	11,682	10,322	20,401	50,025	93,111	106,096
Integrated							
Employees	*	*	*	*	55.4	56.6	56.6
Payroll—Total	*	*	*	*	$676,967	$940,035	$1,035,855
Operating	*	*	*	*	548,291	762,005	843,190
Construction	*	*	*	*	91,439	124,645	127,938
Miscellaneous	*	*	*	*	37,237	53,385	64,726
Combination							
Employees	*	*	*	*	52.4	49.1	52.6
Payroll—Total	*	*	*	*	$726,298	$860,151	$1,007,689
Operating	*	*	*	*	597,790	713,126	819,790
Construction	*	*	*	*	113,693	132,325	172,512
Miscellaneous	*	*	*	*	14,815	14,699	15,387

*Not available.

TABLE 154
EMPLOYEE ACCIDENT INCIDENT AND SEVERITY RATES OF SELECTED INDUSTRIES, 1978[a]

	Rate	
	Incident	Severity
Gas Utilities[b]	**2.69**	**15.98**
All Industries	**2.56**	**18.36**
Agricultural Chemicals	1.74	14.94
Aircraft	0.99	18.18
Air Transportation	5.29	12.66
Bituminous Coal	4.21	15.68
Cement	3.86	22.54
Chemical	1.10	20.00
Communications	0.87	16.09
Construction	3.94	20.81
Electric, Electronic Equipment	1.10	18.18
Electric Service	1.96	18.88
Fabricated Metal Products	2.21	16.74
Food	4.59	17.86
Furniture and Fixtures	2.86	18.88
General Government	7.15	14.13
Iron and Steel Foundries	2.93	19.79
Leather	3.48	16.67
Lumber and Wood Products	5.96	23.15
Machinery, Exc. Electrical	2.43	16.05
Meat Products	5.90	13.73
Metal Mining	3.00	38.33
Motor Vehicles	1.41	17.02
Nonferrous Rolling, Drawing	2.38	24.37
Nonmetallic Minerals	4.88	28.48
Oil and Gas Extraction	1.39	22.30
Paper	3.05	24.59
Petroleum and Coal Products	1.78	21.91
Pipeline Transportation	1.14	18.42
Primary Nonferrous Metals	3.04	23.35
Printing and Publishing	2.99	20.74
Railroad Equipment	8.61	19.63
Railroad Transportation	6.64	17.92
Rubber and Plastics	2.77	23.83
Services	3.77	11.94
Ship and Boat Building	4.86	19.45
Steel	2.17	27.19
Stone, Clay and Glass	5.47	18.28
Textile	0.92	34.78
Transit	3.81	17.85
Trucking	11.75	14.13
Water Transportation	2.10	29.52
Wholesale and Retail Trade	3.21	13.71

a. Incident rate is the number of disabling injuries per 100 full-time employees. Severity rate is average lost workdays per injury.
b. Gas figures derived from National Safety Council data.
Source: National Safety Council

TABLE 155
DEATH RATES OF WORKERS, BY MAJOR INDUSTRIES, 1978

	Deaths	
	Total	Per 100,000 Workers
All Industries	**13,000**	**14**
Agriculture	1,900	54
Construction	2,600	57
Government	1,700	11
Manufacturing	1,800	9
Mining, Quarrying, Oil and Gas Wells	500	63
Service	1,700	7
Trade	1,300	6
Transportation and Public Utilities	1,500	29
Gas*	8	6

*Included in Transportation and Public Utilities. Data derived from A.G.A. "Report of Occupational Injuries and Illnesses in the Gas Utility and Transmission Industry in the United States," and does not represent total industry.
Source: National Safety Council; gas figures derived from A.G.A. data.

TABLE 156

EMPLOYEE DISABLING INJURY RATES, BY TYPE OF GAS, 1955-1979

Z16.1 DATA

Year	All Reporting Gas Utilities				bution and Integrated Companies		Transmission Companies		Combination Companies[a]	
	Reporting Companies		Rate[b]		Rate		Rate		Rate	
	Number	Average Employees	Frequency[c]	Severity[d]	Frequency[c]	Severity[d]	Frequency[c]	Severity[d]	Frequency	Severity
1955	392	180,822	10.17	694	9.91	466	9.97	1,549	e	e
1956	407	189,287	8.68	652	8.37	506	8.62	858	e	e
1957	433	192,355	8.08	462	7.96	442	7.79	546	e	e
1958	516	193,748	8.07	683	7.99	592	8.38	984	e	e
1959	508	192,942	7.31	526	7.78	432	6.37	983	e	e
1960	554	195,591	7.01	563	7.45	616	5.83	332	e	e
1961	581	192,287	6.57	481	6.73	396	5.85	868	e	e
1962	579	194,615	6.41	490	6.69	467	5.81	630	e	e
1963	581	196,376	6.27	546	6.47	439	5.37	1,020	e	e
1964	600	197,023	5.87	465	5.96	416	5.17	644	e	e
1965	625	198,815	5.69	402	5.93	314	4.34	753	e	e
1966	674	200,600	5.85	623	6.10	451	4.55	1,382	e	e
1967	642	202,427	5.69	454	6.07	376	4.32	814	e	e
1968	652	199,442	6.06	533	6.48	478	4.25	799	e	e
1969	703	204,771	6.16	525	6.54	500	4.37	589	e	e
1970	719	200,493	6.34	548	6.66	522	5.02	686	e	e
1971	833	210,589	7.15	473	7.48	444	5.70	634	e	e
1972	736	205,371	8.38	535	8.98	495	5.88	762	e	e
1973	708	207,423	8.18	547	8.77[f]	373[f]	5.67	1,287	e	e
1974	644	208,283	9.08	357	9.75[g]	362[g]	6.12	333	e	e
1975	515	193,957	9.27	570	9.99[g]	518[g]	6.37	785	e	e
1976	407	153,538	11.17	365	12.87[g]	403[g]	5.31	236	e	e

OSHA DATA

Year	All Reporting Gas Utilities				Natural Gas Distribution and Integrated Companies		Natural Gas Transmission Companies		Natural Gas Combination Companies	
	Reporting Companies		Rate		Rate		Rate		Rate	
	Number	Average Employees	Incident[h]	Severity[i]	Incident[h]	Severity[i]	Incident[h]	Severity[i]	Incident[h]	Severity[i]
1976	411	223,240	2.38	20.00	3.27	18.78	1.08	39.24	1.96	19.63
1977	433	243,773	2.46	18.01	3.31	15.86	1.09	20.63	2.00	20.54
1978	423	236,661	2.46	17.11	3.41	14.86	1.10	22.51	2.10	18.90
1979	443	256,797	2.52	16.76	3.57	15.01	1.16	24.71	1.97	17.81

a. Included in "Natural Gas Distribution" and "Integrated Companies" under Z16.1 data.
b. Includes "Manufactured and Mixed Gas" and "Liquefied Petroleum Gas."
c. Frequency Rate is number of disabling injuries per million man-hours worked for each injury resulting in a minimum of one day's loss of time.
d. Severity Rate is number of days lost due to disabling injuries, per million man-hours worked.
e. Not available under Z16.1 data.
f. Includes "Manufactured and Mixed Gas."
g. Includes "Manufactured and Mixed Gas" and "Liquefied Petroleum Gas."
h. Incident Rate is total injuries per 100 full-time employees.
i. Severity Rate is average lost workdays per injury.
NOTE: Companies are now required to report under the Occupational Safety and Health Act (OSHA) instead of ANSI Standard Z16.1.
Source: A.G.A. Disabling Injury Experience.

APPENDIX A
Glossary

(This is an abbreviated list of gas utilty industry definitions. A complete list is contained in the Glossary for the Gas Industry).

Accident Frequency Rate: See Injury Frequency Rate, Disabling.

Accident Incident Rate: See Injury Incident Rate.

Accident Severity Rate: See Injury Severity Rate, Disabling.

Additions (To Utility Plant):

Gross Additions: Cost of construction, generally including overhead and interest during construction, cost of land, land rights, and mineral interests, gas capitalized in underground storage, used facilities acquired, and the purchase cost of an acquired operating unit or system of utility plant. See Construction Expenditures.

Net Additions: Gross additions less retirements and adjustments of utility plant. It is the net change in utility plant between two dates.

Anthracite: A hard coal containing little volatile matter, low ash and generally having a heating value of 12,000-15,000 Btu/lb.

Associated Natural Gas: See Gas, Natural.

Associated Number of Customers: See Customers, Average Number of.

Average Revenue per Btu of Gas Sales (By Class of Service): See Revenue, Average per Btu of Gas Sales.

Barrel (Oil): A volumetric unit of measurement equivalent to 42 U.S. Standard gallons.

Bituminous Coal: Ranking of soft coal generally having a heating value of 11,000-14,000 Btu/lb., high in volatile matter and ash.

Blue Gas: See Water Gas, Blue.

Boiler Fuel: Natural gas used as a fuel for the generation of steam.

Bottled Gas: In the industry, liquefied petroleum gas contained under moderate pressure in cylinders. Usually propane or butane.

British Thermal Unit (Btu): The amount of heat required to raise the temperature of one pound of water one degree Farenheit under stated conditions of pressure and temperature.

By-Products (Residuals): Secondary products which have commercial value and are obtained from the processing of a raw material. They may be the residual of the gas production process, such as coke, tar, and ammonia, or they may be the result of further processing of such residues, such as ammonium sulphate.

Capacity, Effective: The maximum load which a machine, apparatus, device, plant or system is capable of carrying under existing service conditions.

Carbon Black: Almost pure amorphous carbon consisting of extremely fine particles, usually produced from gaseous or liquid hydrocarbons by controlled combustion with a restricted air supply, or by thermal decomposition.

Casinghead: See Gas, Casinghead.

City Gate: See Gate Station.

Class of Service: Defines the type of customer. The common classes of service applied to ultimate consumers, and considerably more completely described in the A.G.A. publication "Definitions of a Gas Customer and Classes of Service for Industry Reporting Purposes" are:

1. **Residential Service**
   Covers service to customers for domestic purposes (single, multifamily or mobile homes, etc.). In residential service, the number of housing units within a structure determines the customer classification.

2. **Commercial Service**
   Covers service to customers engaged in wholesale or retail trade, agriculture, communications, finance, fisheries, forestry, government insurance, real estate, transportation, etc., and to customers not directly involved in other classes of service.

3. **Industrial Service**
   Covers service to customers engaged primarily in a process which either involves the extraction of raw materials from the earth, or a change of raw or unfinished materials into another form or product. This class includes sales of gas for the generation of electric power.

4. **Other Services**
   Service to municipalities or divisions (agencies) of State or Federal Governments under special contracts or agreements or service classifications, which are applicable only to public authorities using gas for general or institutional purposes. (Exclude sales properly included under items 2 or 3 above, such as manufacturing arsenals or publicly-owned power systems).

5. **Sales for Resale** (Uniform System of Accounts, 483)
   Service to other utility companies, governmental agencies (municipal, county, state or federal), rural cooperatives, etc., for distribution and resale to ultimate customers. Service to other utilities for use by them and not for distribution and resale, is to be classified as residential, commercial, or industrial, depending upon the primary business or economic activity.

Coal Gas: Manufactured gas made by distillation or carbonization of coal in a closed coal gas retort, coke oven, or other vessel.

Combination Utility: Utility which supplies both gas and some other utility service (electricity, water, traction, etc.). For purposes of A.G.A. statistics, a combination utility derives at least 5 percent but less than 95 percent of its total operating revenues from gas operations. See Appendix C for a list of combination companies.

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Commercial Services: See Class of Service.

Communities (Served): A community is a city, village, or unincorporated area commonly recognized as a separate entity. Any incorporated area should be counted as only one community.

Compressor Horsepower: See Horsepower, Compressor.

Compressor Station: Any permanent combination of facilities which supplies the energy to move gas in transmission lines or into storage by increasing the pressure. For reporting to A.G.A. include field (other than temporary), line, and storage compressor stations of producing and transmission companies; distribution companies should include underground storage compressor stations and stations used for transporting gas between local distribution systems but not booster or pumping stations used within a local distribution system.

Condensate: The liquid resulting when a vapor is subjected to cooling and/or pressure reduction. Also, liquid hydrocarbons condensed from gas and oil wells.

Construction Expenditures: Cost of construction, including overheads and interest during construction, for additions to, betterments, renewals, and replacements of plant facilities, but excluding the purchase cost of an acquired operating unit or system of utility plant, accounting transfers and adjustments to utility plant, and cost to remove plant facilities from service.

Conversion to Natural Gas: Changing the gas service to ultimate customers from gas other than natural gas to natural gas, including adjustments of consumer's appliances to perform satisfactorily with natural gas. Natural gas does not necessarily mean straight natural gas; stabilizing the heat content of the sendout gas by diluent gases or enriching gases is considered not to change the basic character of natural gas. For the purpose of uniform reporting a company should be considered a natural gas company when 95 percent of the system has been converted.

Cubic Foot: The most common unit of measurement of gas volume. It is the amount of gas required to fill a volume of one cubic foot under stated conditions of temperature, pressure, and water vapor.

Current Gas: See Storage, Underground.

Cushion Gas: See Storage, Underground.

Customer: An individual, form or organization which purchases service at one location under one rate classification, contract, or schedule. If service is supplied at more than one location or under more than one rate schedule, each location and rate schedule shall be counted as a separate customer. Where service is used for only part of a month (partial billing period), initial bills only shall be counted; final bills are not counted as customers. See Customers, End of Year; Customers, Average Number of; Class of Service.

Customers, Average Number of: The average number of customers is determined by summing the customers for each of the periods involved and dividing by the number of periods.

Customers, End of Year: The number of customers at December (or the last month of a fiscal year) including all billing cycles. See Customers, Average Number of.

Degree Day, Heating: A measure of the coldness of the weather experienced, based on the extent to which the daily mean temperature falls below a reference temperature, usually 65°F. For example, on a day when the mean outdoor dry-bulb temperature is 35°F., there would be 30 degree days experienced. A daily mean temperature usually represents the sum of the high and low readings divided by two.

Demand: The rate at which gas is delivered to or by a system, part of a system, or a piece of equipment, expressed in cubic feet or therms or multiples thereof, for a designated period of time called the demand interval. Compare Load.

Design Day: A 24-hour period of the greatest theoretical gas demand, used as a basis for designing purchase contracts, and/or production facilities, and/or delivery capacity.

Design Day Availability: The amount of each type of gas arranged to be available on the design day and the maximum combination of such supplies. (In the case of purchased natural gas, the maximum day allocation, maximum day contract quantity, or FPC authorization).

Design Day Temperature: The mean temperature assumed for the Design Day.

Dissolved Natural Gas: See Gas, Natural: Dissolved.

Distribution Company, Gas: Company which obtains the major portion of its gas operating revenues from the operation of a retail gas distribution system, and which operates no transmission system other than incidental connections within its own system or to the system of another company. For purposes of A.G.A. statistics, a distribution company obtains at least 95 percent of its gas operating revenues from sales to ultimate customers *and* classifies at least 95 percent of mains (other than service pipe) as distribution. Compare Integrated Company, Gas; Transmission Company, Gas. See Appendix C for a list of Distribution Companies.

Distribution Mains: See System, Distribution.

Distribution System: See System, Distribution.

Dry Natural Gas: See Gas, Dry.

Enriching: Increasing the heat content of a gas by mixing with it a gas of higher Btu content.

Established Reserves: Those reserves recoverable under current technology are present and anticipated economic conditions, specifically proved by drilling, testing or production, plus that judgment portion of contiguous recoverable reserves that are interpreted to exist, from geological, geophysical or similar information, with reasonable certainty.

Exchange Gas: Gas that is received from (or delivered to) another party in exchange for gas delivered to (or received from) such other party.

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Extraneous Gas: See Storage, Underground.

Field Pipeline: See System, Field and Gathering.

Firm Service: Service offered to customers (regardless of Class of Service) under schedules or contracts which anticipate no interruptions. The period of service may be for only a specified part of the year as in Off-Peak Service. Certain firm service contracts may contain clauses which permit unexpected interruption in case the supply to residential customers is threatened during an emergency. Compare Interruptible Service; and Off-Peak Service.

Foreign Gas: See Storage, Underground.

Gallon: A unit of liquid measure. The U.S. gallon contains 231 cubic inches or 8.3359 pounds avoirdupois of distilled water at its maximum density and with the barometer at 30 inches.

Gas, Casinghead: Unprocessed natural gas produced from a reservoir containing oil. Sometimes called Bradenhead Gas.

Gas, Dry: See Gas, Natural.

Gas, Liquefied Petroleum: A gas containing certain specific hydrocarbons which are gaseous under normal atmospheric conditions, but can be liquefied under moderate pressure at normal temperatures. Propane and butane are the principal examples.

Gas, Manufactured: A gas obtained by destructive distillation of coal, or by the thermo decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke. Examples are coal gases, coke over gases,producer gas, blast furnace gas, blue (water) gas, carbureted water gas Btu content varies widely.

Gas, Natural: A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in porous geologic formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane.

Associated: Free natural gas in immediate contact, but not in solution with crude oil in the reservoir.

Dissolved: Natural gas in solution in crude oil in the reservoir.

Dry: (1) Gas whose water content has been reduced by a dehydration process. (2) Gas containing little or no hydrocarbons commercially recoverable as liquid product. Gas in this second definition preferably should be called lean gas. Specified small quantities of liquids are permitted by varying statutory definition in certain states.

Liquefied (LNG): Natural gas which has been liquefied by reducing its temperature to minus 260°F at atmospheric pressure. It remains a liquid at −116°F and 673 PSIG. In volume it occupies 1/600 of the gas in the vapor state.

Liquids: Those liquid hydrocarbon mixtures which are gaseous at reservoir temperatures and pressures, but are recoverable by condensation or absorption. Natural gasoline and liquefied petroleum gases fall in this category.

Non-Associated: Free natural gas not in contact with, nor dissolved in, crude oil in the reservoir.

Sour: Gas found in its natural state, containing such amount of compounds of sulphur as to make it impractical to use, without purifying, because of its corrosive effect on piping and equipment.

GAS FACTS

Substitute: A gas manufactured carbonaceous material whose characteristics are substantially interchangeable with natural gas. The resultant gas is composed primarily of methane. At this writing, SNG feedstocks are the light hydrocarbons, propane, butane and the naphthas. Development is underway of processes for production from heavier feedstocks and from coal.

Sweet: Gas found in its natural state, containing such small amount of compounds of sulphur that it can be used without purifying, with no deleterious effect on piping and equipment.

Wet: Wet natural gas is unprocessed natural gas or partially processed natural gas, produced from strata containing condensable hydrocarbons. The term is subject to varying legal definitions as specified by certain state statutes.

Gas, Oil: A gas resulting from the thermal decomposition of petroleum oils, composed mainly of volatile hydrocarbons and hydrogen. The true heating value of oil gas may vary between 800 and 1600 Btu per cubic foot depending on the operating conditions and feedstock properties.

Gas, Substitute Natural (SNG): See Gas, Natural.

Gas Transported for Others: That volume of gas owned by another company received into and transported through any part of the transmission system under a transportation tariff.

Gate Station: A location at which gas changes ownership, from one party to another, neither of which is the ultimate consumer. Also referred to as city gate station, town border station.

Gathering Pipeline: See System, Field and Gathering.

Heating Value: The amount of heat produced by the complete combustion of a unit quantity of fuel. The gross, higher heating value, is that which is obtained when all of the products of combustion are cooled to the temperature existing before combustion, the water vapor formed during combustion is condensed, and all the necessary corrections have been made. The net, or lower heating value, is obtained by subtracting the latent heat of vaporization of the water vapor formed by the combustion of the hydrogen in the fuel from the gross, or higher heating value.

Holder, Gas: A gas tight receptacle or container in which gas is stored for future use. There are two general ways of storing gas: (1) at approximately constant pressure (low pressure containers) in which case the volume of the container changes and, (2) in container of constant volume (usually higher pressure container) in which case the quantity of gas stored varies with the pressure.

Holding Company: A gas holding company is a corporation that is formed for the purpose of owning stock in other gas companies.

Horsepower, Compressor: The horsepower rating on the nameplate.

Horsepower, Mechanical: A unit of power numerically equal to a rate of 33,000 foot-pounds of work per minute or 550 foot-pounds per second.

Hydrocarbon: A compound that contains only hydrogen and carbon. The simplest and lightest forms of hydrocarbon are gaseous. With greater molecular weights they are liquid, while the heaviest are solids.

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Industrial Service: See Class of Service.

Injury Frequency Rate, Disabling: Number of disabling injuries per million man-hours worked. Such injuries include disabilities and fatalities arising out of and occurring during the course of employment. A disabling injury is one which renders the employee unable to return to work on one or more days after the injury.

Injury Incident Rate: Number of injuries per 100 full-time employees.

Injury Severity Rate, Disabling: Number of days lost due to disabling per million man-hours worked, including appropriate time charges according to a predetermined schedule for permanent disability cases and/or fatalities. Subsequent to 1976, Severity rate is average lost workdays per injury.

Integrated Company: A company which obtains a significant portion of its gas operating revenues from the operations of both a retail gas distribution system and gas transmission system. For purposes of A.G.A. statistics, an integrated company obtains less than 95 percent but more than 5 percent of its gas operating revenues from either its retail or transmission operations or does not meet the classification of mains established for distribution or transmission companies. Compare Distribution Company, Gas; Transmission Company, Gas. See Appendix C for a list of Integrated Companies.

Interruptible Service: Low priority service offered to customers under schedules or contracts which anticipate and permit interruption on short notice, generally in peak-load seasons, by reason of the claim of firm service customers and higher priority users. Unlike Off-Peak Service, gas is available at any time of the year if the supply is sufficient.

Liquefied Natural Gas (LNG): See Gas, Natural.

Liquefied Petroleum Gas (LPG): See Gas, Liquefied Petroleum.

Line Pack, Gas Delivered from: That volume of gas delivered to the markets supplied by the net change in pressure in the regular system of mains, transmission and/or distribution. For example, the change in the content of a pipeline brought about by the deviation from steady flow condition.

Load: The amount of gas delivered or required at any specified point or points on a system; load originates primarily at the gas consuming equipment of the customers. Also, to load a governor is to set the governor to maintain a given pressure as the rate of gas flow through the governor varies. Compare Demand.

Local Storage: See Storage, Local.

Mcf: An abbreviation meaning 1000 cubic feet.

MMBtu: An abbreviation meaning 1,000,000 Btu.

MMcf: An abbreviation meaning 1,000,000 cubic feet.

Main, Gas: The network of distribution piping to which customers' service lines are attached. Generally, large pipes are laid in principal streets with smaller laterals extending along side streets and connected at their ends to form a grid; sometimes laterals are brought to dead ends.

Distribution Mains: See System, Distribution.

Field and Gathering Pipeline: See System, Field and Gathering.

Transmission Pipeline: See System, Transmission.

Manufactured Gas: See Gas, Manufactured.

Marketable Natural Gas: Raw gas from which certain hydrocarbons and non-hydrocarbon compounds have been removed by processing. Marketable natural gas is often referred to as pipeline gas, residue gas, or sales gas.

Maximum Day:
Allocation: See Design Day Availability.

Sendout: See Sendout, Maximum Day.

Minimum Day: See Sendout, Minimum Day.

Naphtha: Any of various volatile, often flammable liquid hydrocarbon mixtures used chiefly as solvents and diluents and as raw materials for conversion to gasoline and substitute natural gas(SNG).

Native Gas: See Storage, Underground.

Natural Gas: See Gas, Natural.

Natural Gas, Associated: See Gas, Natural.

Natural Gas, Dissolved: See Gas, Natural.

Natural Gas, Dry: See Gas, Natural.

Natural Gas, Liquefied: See Gas, Natural.

Natural Gas Liquids: See Gas, Natural.

Natural Gas, Non-Associated: See Gas, Natural.

Natural Gas Reserves: See Reserves.

Natural Gas, Sour: See Gas, Natural.

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Natural Gas, Sweet: See Gas, Natural.

Natural Gas, Wet: See Gas, Natural.

Natural Gasoline: Those liquid hydrocarbon mixtures containing substantial quantities of pentanes and heavier hydrocarbons, which have been extracted from natural gas and liquid that remain after previous separation of liquid containing condensate or crude oil.

New Gas: Gas being made available for the first time by a contract of purchase and sale.

Off-Peak Service: Service made available on special schedules or contracts on a firm basis but only for a specified part of the year during the off-peak season. Compare Interruptible Service.

Oil Gas: See Gas, Oil.

Oil, Heavy: Heavy, thick and viscous, usually residuals commonly specified as grades, 5, 6 and Bunker C.

Oil, Light: Generally, all oils lighter than residual fuel oils No. 5 and No. 6. Oils that have a low specific gravity, usually products of controlled distillation of crude oil but also including by-product benzol and toluol.

Peak-Day: The 24-hour day period of greatest total gas sendout.

Peak Shaving: Supplying fuel gas for distribution system from an auxiliary source during periods of maximum demand, when the primary source is not adequate.

Pipeline: All parts of those physical facilities through which gas is moved in transportation, including pipe, valves and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders and fabricated assemblies.

Pressure, Absolute (PSIA): Pressure above that of a perfect vacuum. It is the sum of gauge pressure and atmospheric pressure.

Pressure, Gauge (PSIG): Pounds per square inch above atmospheric pressure.

Producer Gas: A combustible gas made in a furnace or apparatus by circulating air or a mixture of air and steam through a layer of incandescent gas; consists chiefly of carbon monoxide, hydrogen and nitrogen.

Propane (C_3H_3): A gaseous member of the paraffin series of hydrocarbons, which when liquefied under pressure is one of the components of LPG. Contains approximately 2,500 Btu per cubic foot (at 60°F and 30′ mercury, and 91, 740 Btu per gallon).

Recoverable Natural Gas Reserves: See Reserves, Recoverable Natural Gas.

Refinery Gas: See Gas, Oil.

Reforming: A chemical process using heat in presence of a catalyst to break down a substance into desired components.

Repressuring: Forcing gas, under pressure, into the oil reservoir in an attempt to increase the recovery of crude oil; also done with water.

Resale Service: See Class of Service—Sales for Resale.

Reserves:

Estimated Potential Natural Gas Resources: Refers to an estimate of the ultimate finding of natural gas in a specified area, whether or not presently considered proved or recoverable.

Estimated Proved Recoverable Natural Gas Reserves: An estimated quantity of natural gas which analysis of geologic and engineering data demonstrates with reasonable certainty to be recoverable in the future from known oil and gas reservoirs, under existing economic and operating conditions. Reservoirs are considered proved that have demonstrated the ability to produce by either actual production of conclusive formation test.

Revenue, Average per Btu of Gas Sales (By Class of Service): Revenue from the sale of gas to a class of service, exclusive of forfeited discounts and penalties, divided by the corresponding number of Btu's sold. (May calculate average revenue per Mcf).

Saturation, Appliance or Customer: The number of specified appliances, or users, divided by the basic units or total potential of the universe involved, i.e., Gas Heating Saturation related to customers in the total number of customers with space heating divided by the total number of customers.

Sendout, Gas: Total gas produced, purchased (including exchange gas receipts), or net withdrawn from underground storage within a specified time interval, measured at the point(s) of production and/or purchase, and/or withdrawal, adjusted for changes in local storage quantity. It comprises gas, exchange, deliveries, gas used by company and unaccounted for gas.

Sendout, Maximum Day: The greatest total gas sendout occurring in a specified 24-hour period.

Sendout, Minimum Day: The smallest actual total gas sendout occurring in a specified 24-hour period.

Service (Service Line, Service Pipe): The pipe which carries gas from the main to the customer's meter.

Shrinkage, Natural Gas: The reduction in volume of wet natural gas due to the extraction of some of its constituents, such as hydrocarbon products, hydrogen sulfide, carbon dioxide, nitrogen, helium, and water vapor.

Storage, Buried Pipe: A system of storage in especially designed high pressure pipe sections or bottles capable of storing natural gas at pressures near or equal to the pressure of maximum super-compressibility. Not storage in ordinary steel pipe.

Storage, Local: The storage facilities, other than underground storage, that are an integral part of a distribution system, i.e., on the distribution side of the city gate, whether for manufactured, mixed, natural, liquefied petroleum, or liquefied natural gases.

Storage Mains: Those mains used primarily for injection and withdrawal of gas to and from underground storage.

Storage, Underground: The utilization of subsurface facilities for storing gas which has been transferred from its original location for the primary purposes of load balancing, fuller utilization of pipeline facilities, and more effective and economic delivery to markets. The facilities are usually natural geological reservoirs such as depleted oil or gas fields or waterbearing sands sealed on the top by an impermeable cap rock. The facilities also may be manmade or natural caverns.

Aquifer Storage: The storage of gas underground in porous and permeable rock stratum, the pore space of which was originally filled with water and in which the stored gas is confined by suitable structure, permeability barriers and hydrostatic water pressure.

Current Gas: The total volume of gas in a storage reservoir which is in excess of the cushion gas.

Cushion Gas: The total volume of gas which will maintain the required rate of delivery during an output cycle.

Extraneous Gas: That volume of gas which is not indigenous to the storage reservoir.

Foreign Gas; Stored Gas: See Extraneous Gas, above.

Native Gas: The total volume of gas indigenous to the storage reservoir at the time gas storage started.

Storage Reservoir: That part of the storage zone having a defined limit of porosity and/or permeability which can effectively accept, retain, and deliver gas.

Storage Well: A cased bore hole, extending from the surface into the storage reservoir, which is used primarily for gas input and/or output purposes.

Stored Gas; Foreign Gas: See Extraneous Gas, above.

Ultimate Reservoir Capacity: The total estimated volume of gas that could be contained in an underground storage reservoir when it is developed to the maximum design pressure.

Working Gas: See Current Gas.

Stored Gas; Foreign Gas: See Storage, Underground.

Straight Gas Utility: Company which derives the major portion of its total operating revenue from gas operations. For purposes of A.G.A. statistics, a straight gas utility derives at least 95 percent of its total operating revenues from gas operations.

Subbituminous Coal: Ranking of soft coal generally having a heating value of 8,300-13,000 Btu's/lb, high volatile matter and ash.

Substitute Natural Gas: See Gas, Substitute Natural.

System:

Distribution: Generally, mains, services, and equipment which carry or control the supply of gas from the point of local supply to and including the sales meters.

Field and Gathering: A network of pipelines (mains) transporting natural gas from individual wells to compressor station, processing point, or main trunk pipeline.

High Pressure: A system which operates at a pressure higher than the standard service pressure delivered to the customer; thus, a pressure regulator is required on each service to control pressure delivered to the customer. Sometimes this is referred to as Medium Pressure.

Low Pressure: A system in which the gas pressure in the mains and service lines is substantially the same as that delivered to the customer's appliances; ordinarily a pressure regulator is not required on individual service lines.

Transmission: Pipelines (mains) installed for the purpose of transmitting gas from a source or sources of supply to one or more distribution centers, or to one or more large volume customers, or a pipeline installed to interconnect sources of supply. In typical cases transmission lines differ from gas mains in that they operate at higher pressures, are longer, and the distance between connections is greater.

Therm: A unit of heating value equivalent to 100,000 British thermal units (Btu).

Transmission Company, Gas: Company which obtains the major portion of its gas operating revenues from the operation of a gas transmission system and/or from main line sales to industrial customers. For purposes of A.G.A. statistics, a transmission company obtains at least 95 percent of its gas operating revenues from sales for resale and/or transportation of gas for others and/or main line sales to industrial customers *and* classifies at least 95 percent of mains (other than service pipe) as field and gathering, storage and/or transmission. Compare Distribution Company, Gas; Integrated Company. See Appendix C for a list of Transmission companies.

Transmission Pipeline: See System, Transmission.

Transmission System: See System, Transmission.

Ultimate Customer: The customer who purchases gas for consumption and not for resale purposes.

Ultimate Reservoir Capacity: See Storage, Underground.

Unaccounted for Gas: The difference between the total gas available from all sources and the total gas accounted for as sales, net interchange and company use. This difference includes leakage or other actual losses, discrepancies due to meter inaccuracies, variations of temperature and/or pressure, and other variants particularly billing lag. Compare Sendout, Gas.

Underground Storage: See Storage, Underground.

Water Gas (Blue Gas): A gas manufactured by passing steam through an incandescent bed of coke or coal. It consists chiefly of equal percentages of carbon monoxide and hydrogen and generally has a heating value of about 320 Btu per cubic foot.

Well, Wildcat: An exploratory well being drilled in unproven territory, that is, in a horizon from which there is no production in the general area.

Wet Natural Gas: See Gas, Natural.

Working Gas: See Storage, Underground.

APPENDIX B
CONVERSION TABLE

The following are some frequently used units of measure and natural gas equivalents in British thermal units (Btu). Read "=" as "contains" between volumes and energy units. The national average Btu content per cubic foot is used. For state averages, see page 84.

1 Cubic Foot (cf) = 0.02832 Cubic Meters = 1,021 Btu

1 Therm = 100,000 Btu ≅ 25,200 Kilocalories ≅ 100 Cubic Feet

1 Mcf = 1,000 Cubic Feet = 28.32 Cubic Meters = 1,021,000 Btu

1 M Therm = 100,000,000 Btu ≅ 25,200,000 Kilocalories

1 MMcf = 1,000,000 Cubic Feet = 1,021,000,000 Btu

Conversion examples:
(1) To convert 2,325 MMcf to Btu:
(2,325 MMcf) (1,021,000,000 Btu/MMcf)
= 2,369,170,000 Btu
≅ 2.369 trillion Btu
(2) To convert 5,000 trillion Btu to cubic feet:
(5,000 trillion Btu) (1 cf/1,021 Btu)
≅ 4.907 trillion cf (Tcf)
= 4,907,000 MMcf
(3) To convert 22,150 million therms to Btu:
(22,150 million therms) (100,000 Btu/therms)
= 2,215,000,000 million Btu
≅ 2,215 trillion Btu

For comparative purposes, Btu contents of various energy sources other than natural gas are shown below.*

Fuel oil (barrel)	
Distillate	5,825,000 Btu
Residual	6,287,000 Btu
Coal (short ton)	
Bituminous and lignite	22,140,000 Btu
Anthracite	22,970,000 Btu
Electricity (kilowatt-hour)	3,412 Btu
Natural gas liquids (barrel)	3,925,000 Btu

*Energy Information Administration, Department of Energy, *Monthly Energy Review*, June 1979.

APPENDIX C
COMPANY LISTINGS

Shown below are 100 selected companies, 25 for each company type, as used in the financial and other sections of this publication. These lists are not meant to be comprehensive. Inclusion on this list does not imply individual company data may be released.

Distribution

Alabama Gas Corporation
Atlanta Gas Light Company
Bay State Gas Company
Boston Gas Company
Brooklyn Union Gas Co., The
Columbia Gas of Kentucky, Inc.
Columbia Gas of Ohio, Inc.
Columbia Gas of Pennsylvania, Inc.
Columbia Gas of West Virginia, Inc.
East Ohio Gas Company, The
ENTEX, Inc.
Gas Service Company, The
Great Falls Gas Company
Minnesota Gas Service Company
Mississippi Valley Gas Company
North Shore Gas Company
Northern Illinois Gas Company
Northwest Natural Gas Company
Peoples Gas Light & Coke Co., The
Providence Gas Company
Richmond Gas Corp.
Southern Connecticut Gas Company, The
Washington Gas Light Company
Washington Natural Gas Company
Wisconsin Natural Gas Company

Transmission

Algonquin Gas Transmission Company
Alabama Tennessee Natural Gas Co.
Cities Service Gas Company
Colorado Interstate Gas Company
Columbia Gas Transmission Corporation
East Tennessee Natural Gas Company
El Paso Natural Gas Company
Houston Natural Gas Company
Michigan Gas Storage Company
Michigan Wisconsin Pipe Line Company
Midwestern Gas Transmission Company
Natural Gas Pipeline Co. of America
Northwest Pipeline Corporation
Pacific Gas Transmission Company
Pacific Lighting Service Company
Panhandle Eastern Pipe Line Company
Southern Natural Gas Company
Texas Eastern Transmission Corporation
Texas Gas Transmission Corporation
Transco Companies, Inc.
Transok Pipe Line Company
Transwestern Pipeline Company
Trunkline Gas Company
United Gas Pipeline Company
Western Slope Gas Company

Integrated

Arkansas Oklahoma Gas Corporation
Cascade Natural Gas Corporation
Central Indiana Gas Company
Consolidated Gas Supply Corporation
Florida Gas Company
Indiana Gas Company
Intermountain Gas Company
Internorth Incorporated
Kokomo Gas & Fuel Company
Lone Star Gas Company
Michigan Consolidated Gas Company
Michigan Gas Utilities Company
Mountain Fuel Supply Company
National Fuel Gas Company
North Carolina Natural Gas Company
North Penn Gas Company
Oklahoma Natural Gas Company
Peoples Natural Gas Co., The
Piedmont Gas Company
Pioneer Natural Gas Company
Southern California Gas Company
Southern Union Gas Company
Southwest Gas Corporation
Western Kentucky Gas Company
Wisconsin Gas Company

Combination

Arizona Public Service Company
Baltimore Gas and Electric Company
Central Illinois Light Company
Cincinnati Gas and Electric Company
Consolidated Edison Co. of NY Inc.
Consumers Power Company
Dayton Power & Light Company
Florida Public Utilities Company
Illinois Power Company
Iowa Electric Light & Power Company
Iowa-Illinois Gas & Electric Company
Kansas Power & Light Company
Lake Superior District Power Company
Louisville Gas & Electric Company
Montana-Dakota Utilities Company
Montana Power Company
Niagara-Mohawk Power Corporation
Northern Indiana Public Service Company
Pacific Gas & Electric Company
Philadelphia Electric Company
Public Service Co. of Colorado
Public Service Electric & Gas Company
San Diego Gas & Electric Company
Virginia Electric & Power Company
Wisconsin Public Service Corporation

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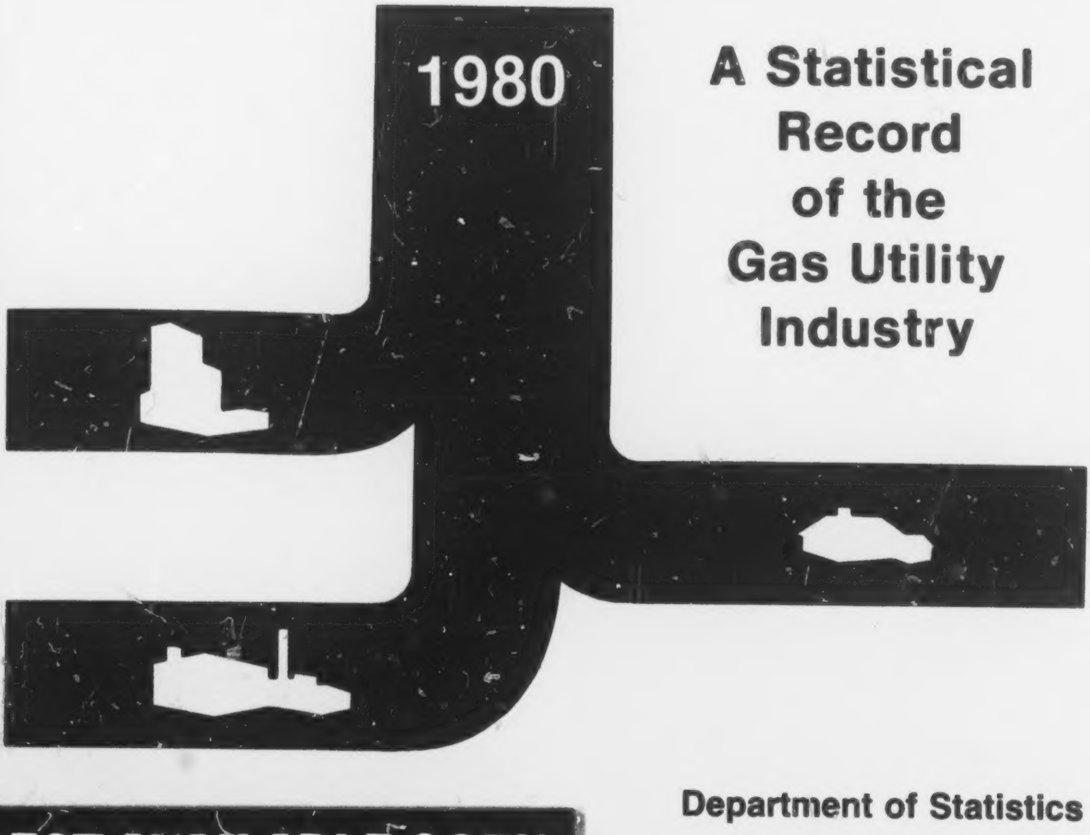

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AMERICAN GAS ASSOCIATION

The American Gas Association assumed its present status as the gas utility industry trade association in 1927, after a merger of two predecessor organizations. It renders assistance to the gas utility industry so that the industry may serve its customers more efficiently. Dependence is placed upon the voluntary cooperation of gas companies and established committees composed of representatives from these companies.

The Association recognizes the need for factual information regarding the gas industry for the use, not only of industry organizations, but also interested outside publics. Its statistical efforts are a vital part of this function, and the publication of *Gas Facts* is one result of these efforts. The statistical activities of A.G.A. are performed by the Department of Statistics with guidance provided by the Statistics and Related Economics Committee.

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*For those unfamiliar with the gas industry energy equivalents, unit conversions are given here.

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INTRODUCTION

GENERAL

This publication contains detailed statistics for 1980 and summary statistics for 1955–1979 for the gas utility industry which by definition, consists of the companies engaged in natural gas transmission and distribution. The publication also contains relevant data on the gas producing segment of the industry and key statistics on other energy industries.

Production data of the gas industry, and pertinent other energy industry data are also included. Gas volumes are expressed in millions of cubic feet and in British thermal units (Btu) to permit direct comparison with other energy data. A conversion table is included as Appendix B.

Appendix C contains a sample listing of gas utility companies according to their classification as distribution, transmission, integrated, or in some cases, combination companies. These classifications are defined in the glossary, Appendix A.

SOURCES OF INFORMATION

Most of the statistical information contained in this volume is developed from data contained in the "Uniform Statistical Report," a detailed information form prepared annually both by electric and gas utility companies. Information is also derived from reports filed with regulatory commissions, from financial publications, and from statistical reports prepared by government and private agencies. For 1980, the gas utility companies participating in the Uniform Statistical Report survey represented 94 percent of total gas utility industry sales. Data for non-reporting companies, whose sales represent the remaining 6 percent, were estimated based on recent historical experience.

Employee accident data were taken from A.G.A.'s "Disabling Injury Experience of the Gas Utility Industry" report. Estimates of proved reserves of natural gas, natural gas liquids and petroleum, as well as related production estimates are not available for the year-end 1980. Data through 1979 is included, and 1980 data will be available for next year's "Gas Facts" publication. Statistics on underground storage operations were developed by the A.G.A. Committee on Underground Storage. Data for gas spaceheating customers were taken from A.G.A.'s "Gas Househeating Survey." Data on new security issues, as well as related cost and yield data, were derived from various financial publications, supplemented by data provided in the Uniform Statistical Report.

ACKNOWLEDGEMENTS

Our thanks go to those companies participating in the Uniform Statistical Report information gathering effort. Their cooperation and support are the essential elements which have made this publication a primary source of gas utility industry data, and an important industry reference. The cooperation of the public and governmental agencies credited in tables is also greatly appreciated.

Credit also goes to the Energy Statisticians of the Statistics Department – Shirley Fontaine, Carlos Hinayon and Judi Schafer. Also contributing to the effort were Tim Wood and Annette Flemming of the Computer Services Department; Bob Kalisch – Director, Gas Supply and Statistics; and Patrick Curley – Manager, Statistical Services.

SECTION I
1980 IN REVIEW

Statistics for 1980 show a continued improvement on the supply side and a slight decrease in gas-utility sales on the demand side.

Although reserves and additions to reserves data for 1980 are not yet available, marketed production increased to over 20 Tcf in 1980, and gas well drilling continued at record levels—both indicators of supply-side improvements.

Transmission and distribution facilities increased to 1,050 thousand miles of pipeline in 1980. Storage capacity climbed to almost 7.5 Tcf. Both of these factors are providing continued improvements in gas utility industry deliverability.

While the 1980 consumption of energy in the United States declined 2.6 percent from 1979, natural gas consumption increased 2.9 percent. Gas utility industry average annual consumption per customer decreased for the first time since 1977. Average residential consumption per customer reached the lowest level since 1962, even though the number of residential customers increased almost 490 thousand to 43.3 million.

Gas utility industry sales decreased 0.2 percent in 1980 to 15,409.4 trillion Btu. All classes of service experienced a decline in sales except for the industrial sector. The industrial sector increase was the direct result of a 30.5 percent increase in electric generation sales. Industrial sales declined 2.2 percent when electric generation sales are not included.

Natural gas prices to end-users rose 24.2 percent in 1980 to $3.13 per million Btu, while wellhead and city gate prices rose 31.6 and 33.1 percent, respectively. The average residential price rose to $3.61 per million Btu, which still compares very favorably with electricity and number 2 fuel oil ($14.45 and $7.21 per million Btu, respectively).

CHART 1

SELECTED GAS INDUSTRY HIGHLIGHTS OF 1980

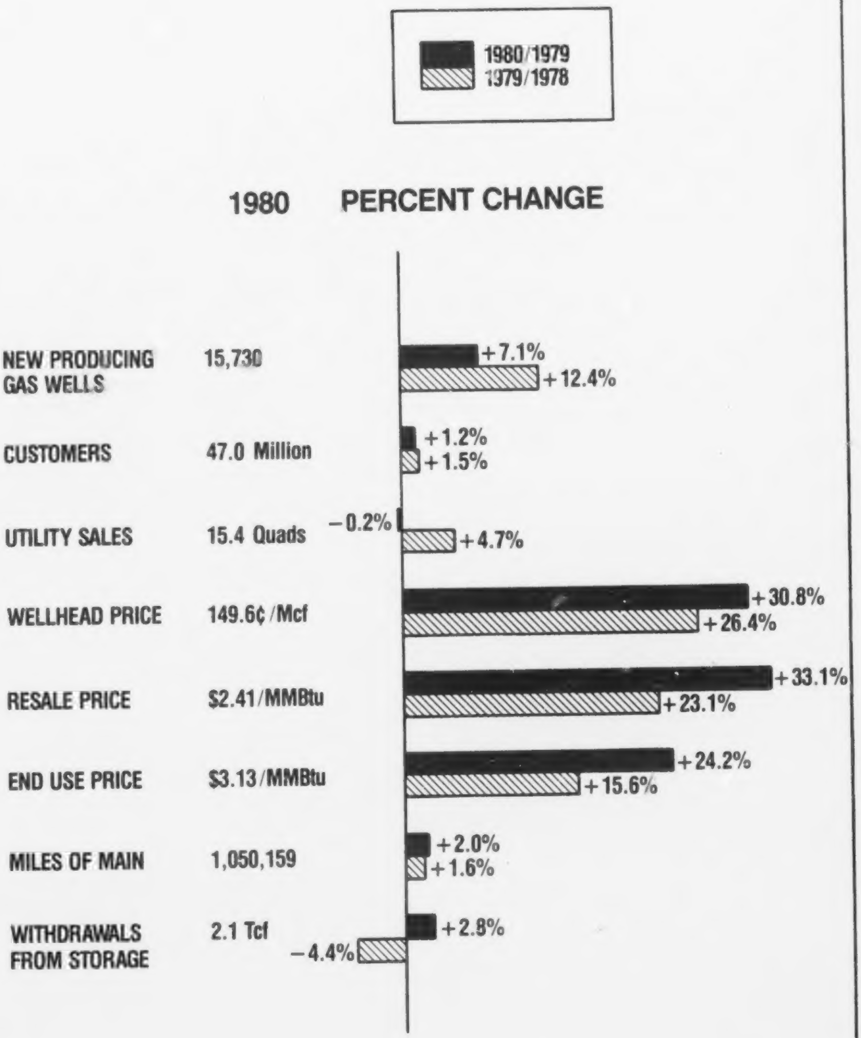


TABLE 1

Comparison of Gas Utility Industry Customers, Sales, and Revenues By Class of Service, 1980 and 1979

(SALES QUANTITIES IN BILLIONS OF BTU, REVENUES IN THOUSANDS OF DOLLARS)

	1980	1979	PERCENTAGE CHANGE
CUSTOMERS—TOTAL*	**47,037,800**	**46,478,300**	**+ 1.2**
RESIDENTIAL	43,311,200	42,821,300	+ 1.1
COMMERCIAL	3,491,000	3,422,800	+ 2.0
INDUSTRIAL	187,800	189,400	− 0.8
OTHER	47,800	44,800	+ 6.7
SALES—TOTAL	**15,409,400**	**15,440,300**	**− 0.2**
RESIDENTIAL	4,823,000	5,083,100	− 5.1
COMMERCIAL	2,441,500	2,485,800	− 1.8
INDUSTRIAL	7,862,000	7,555,000	+ 4.1
OTHER	282,900	316,400	− 10.6
REVENUES—TOTAL	**48,276,152**	**38,947,143**	**+ 24.0**
RESIDENTIAL	17,409,365	14,832,950	+ 17.4
COMMERCIAL	8,148,700	6,623,766	+ 23.0
INDUSTRIAL	22,081,335	16,960,870	+ 30.2
OTHER	636,752	529,557	+ 20.2

*YEARLY AVERAGES

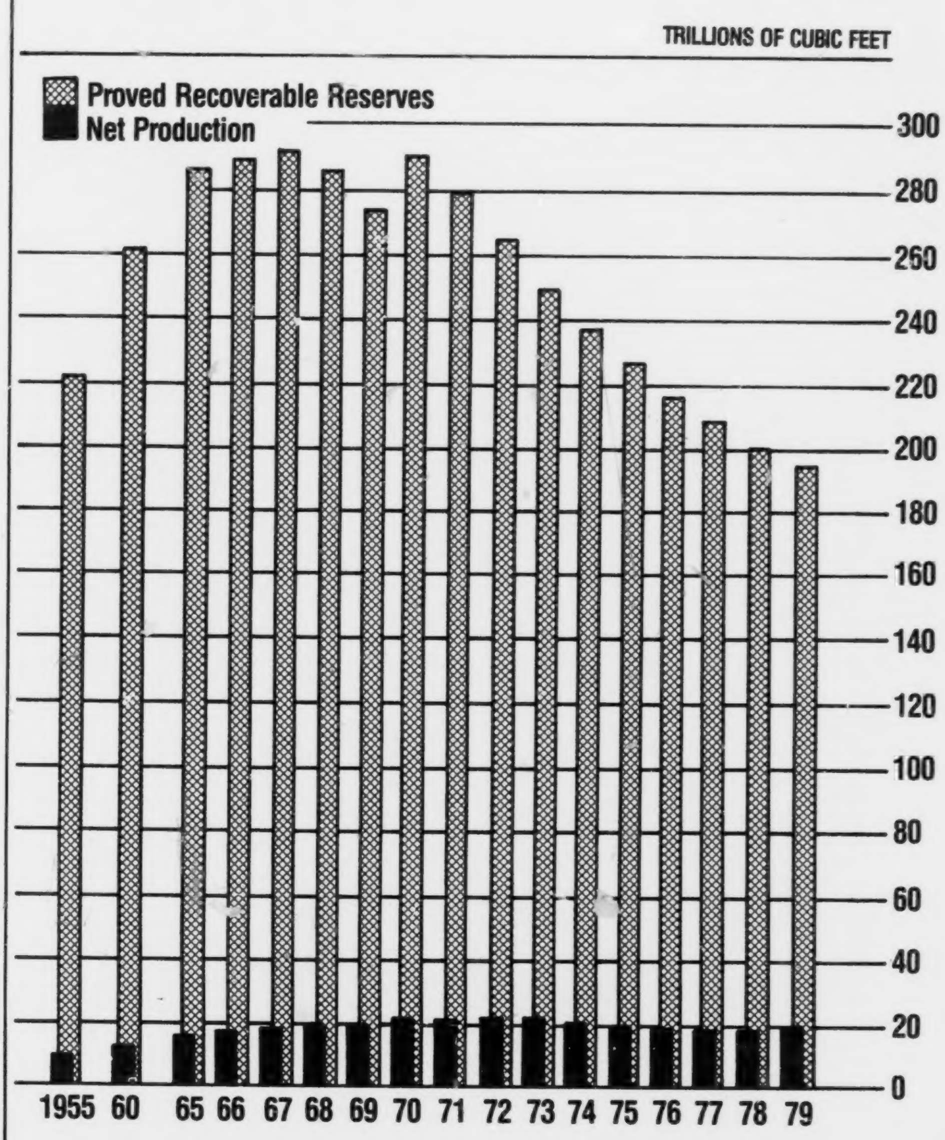
SECTION II
ENERGY RESERVES

Many of the tables in this section display data which was taken from "Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada as of December 31, 1979", a joint publication of A.G.A., A.P.I. and the Canadian Petroleum Association. Ordinarily, 1980 data would be available for inclusion in Gas Facts, except that the joint publication of the yearly reserves report by the A.G.A., A.P.I. and C.P.A. has ceased. The A.G.A. Committee on Natural Gas Reserves is being reorganized and the Department of Energy will publish year-end 1980 reserves data late in the fall of 1981. Thus 1980 year-end reserves will be included in next year's Gas Facts.

	Reserves as of December 31	
	1979	% Change 79/78
Natural Gas		
(Millions of cubic feet)		
Total	194,916,624	− 2.7
Non-Associated	134,189,882	− 3.5
Associated-Dissolved	55,838,660	− 1.5
Underground Storage	4,888,082	+ 5.2
New Additions	14,285,947	+35.0
Natural Gas Liquids		
(Thousands of barrels)		
Total	5,655,323	− 4.6
Non-Associated	3,558,342	− 4.5
Associated-Dissolved	2,096,981	− 4.7
New Additions	389,805	−34.6
Crude Oil		
(Thousands of barrels)		
Total	27,051,289	− 2.7
New Additions	2,205,673	+63.7

CHART 2

PROVED RECOVERABLE RESERVES & NET PRODUCTION OF NATURAL GAS IN THE UNITED STATES *



REFERENCE: TABLES 2 & 3

*1980 data not available. See explanation on page 5.

TABLE 3*
CHANGES IN ESTIMATED PROVED RESERVES OF NATURAL GAS, IN THE UNITED STATES BY STATE, DURING 1979[a]

(Millions of cubic feet)

State	Reserves as of December 31, 1978	Changes in Reserves During 1979			
		Revisions	Extensions	New Field Discoveries	New Reservoir Discoveries
(1) Total United States	**200,301,707**	**2,907,551**	**7,113,113**	**2,575,779**	**1,689,504**
(2) Alabama	751,219	(1,060)	85,116	156,691	896
(3) Alaska	31,612,295	502,434	1,000	50,000	0
(4) Arkansas	1,627,064	67,495	57,161	4,976	4,700
(5) California[d]	5,095,082	129,162	54,108	5,413	68,647
(6) San Joaquin Basin	3,945,963	105,024	50,880	2,600	28,647
(7) Coastal Region[d]	848,070	40,932	2,666	2,813	40,000
(8) Los Angeles Basin[d]	301,049	(16,794)	562	0	0
(9) Colorado	1,965,765	6,640	233,511	22,163	2,601
(10) Florida	160,296	(648)	0	0	0
(11) Illinois	420,437	3,556	0	3,614	0
(12) Indiana	56,710	12	0	0	0
(13) Kansas	12,287,341	752,053	231,363	22,826	8,822
(14) Kentucky	718,929	(331)	26,597	2,116	1,540
(15) Louisiana[d,e]	49,674,148	(77,279)	1,439,423	911,112	834,623
(16) North	2,379,165	100,060	173,788	15,630	38,991
(17) South[d,e]	47,294,983	(177,339)	1,265,635	895,482	795,632
(18) Michigan	1,768,581	101,536	0	29,437	0
(19) Mississippi	1,410,514	(1,700)	134,131	33,302	19,707
(20) Montana	991,668	42,250	50,699	4,074	1,915
(21) Nebraska	72,839	2,293	654	5,000	0
(22) New Mexico	13,261,489	359,531	893,821	44,642	22,349
(23) North	9,646,466	32,086	720,282	7,739	0
(24) South	3,615,023	327,445	173,539	36,903	22,349
(25) New York	262,711	100	22,800	4,100	0
(26) North Dakota	411,485	52,063	31,285	13,071	19,538
(27) Ohio	1,560,478	0	255,397	2,760	2,330
(28) Oklahoma	11,463,291	542,058	782,152	33,647	24,976
(29) Pennsylvania	2,093,516	0	198,075	4,800	0
(30) Texas[d]	54,600,235	156,784	1,880,850	1,120,074	654,154
(31) District 1	1,067,071	22,228	46,734	10,669	9,561
(32) District 2[d]	4,326,275	120,337	27,591	49,895	81,826
(33) District 3[d]	13,273,295	(197,917)	191,870	551,043	41,100
(34) District 4[d]	10,527,441	(624,538)	132,938	142,846	385,212
(35) District 5	692,917	25,043	91,587	14,284	4,561
(36) District 6	4,302,223	(110,121)	466,529	274,598	81,279
(37) District 7B	860,879	(25,438)	309,539	19,561	19,316
(38) District 7C	1,679,012	152,228	16,102	6,572	229
(39) District 8	8,294,307	417,743	172,471	20,955	11,367
(40) District 8A	1,075,564	137,369	20,187	262	175
(41) District 9	990,496	27,942	21,337	6,782	3,948
(42) District 10	7,510,755	211,908	383,965	22,607	15,580
(43) Utah	698,655	6,764	7,657	9,996	581
(44) Virginia	79,064	0	4,200	1,200	0
(45) West Virginia	2,683,136	(199)	300,653	3,150	15,075
(46) Wyoming	4,315,775	263,725	414,160	74,915	6,550
(47) Miscellaneous[f]	258,984	312	8,300	12,700	500
(48) Gulf of Mexico[g]	35,635,006	1,452,375	921,530	1,292,804	595,970

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a. Volumes are calculated at a pressure base 14.73 psi, absolute, and at a standard temperature of 60°F. Reserves of dissolved gas were estimated jointly with the A.P.I. Committee on Petroleum Reserves. As such, "Net Production" differs from the U.S. Bureau of Mines "Marketed Production," which includes natural gas liquids.

b. The net difference between gas stored in and gas withdrawn from underground storage reservoirs, inclusive of adjustments and native gas transferred from other reserve categories.

c. Gas held in underground reservoirs (including native and net injected gas) for storage purposes.

d. Includes offshore reserves.

TABLE 3* (Continued)

CHANGES IN ESTIMATED PROVED RESERVES OF NATURAL GAS, IN THE UNITED STATES BY STATE, DURING 1979[a]

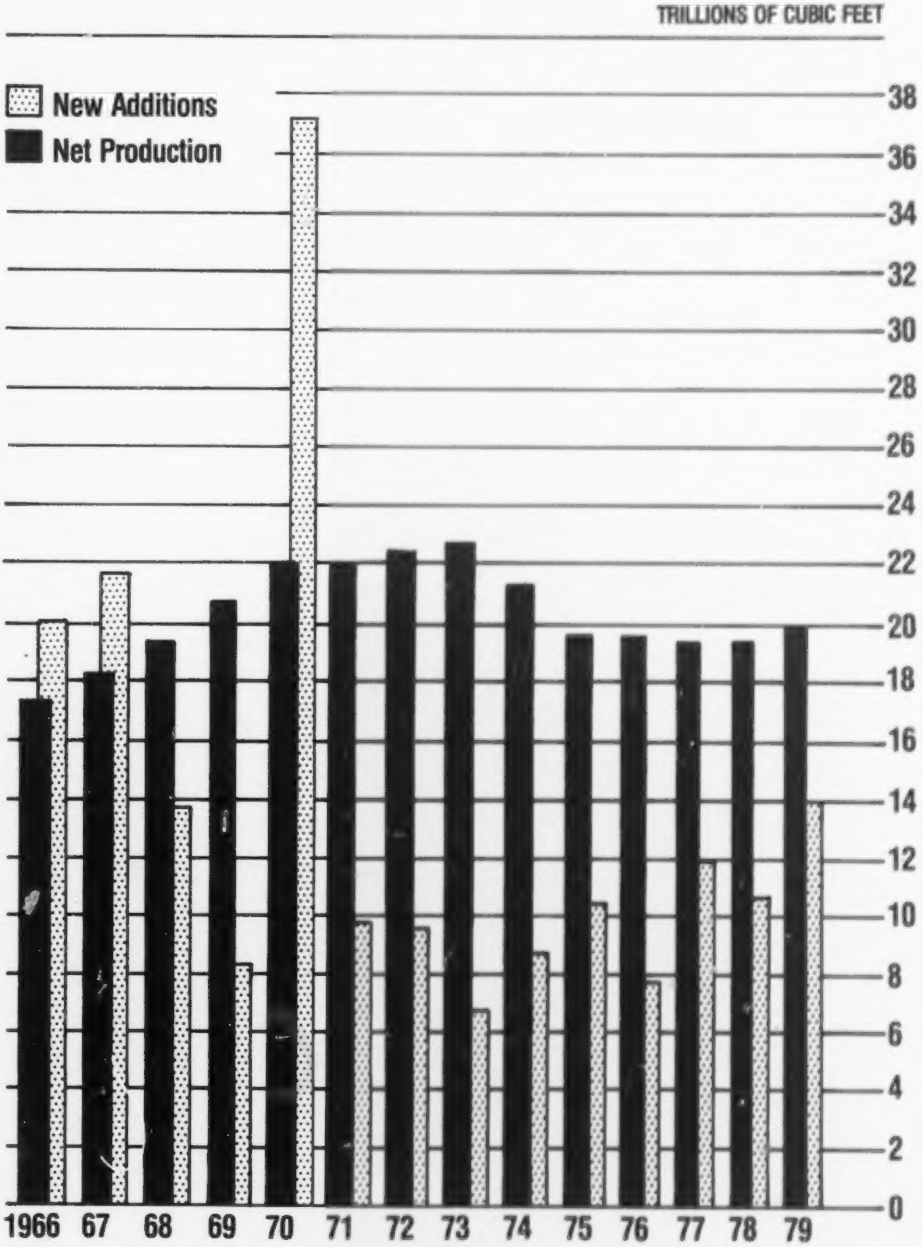
(Millions of cubic feet)

Changes in Reserves During 1979		Reserves as of December 31, 1979				
Net Change in Underground Storage[b]	Preliminary Net Production	Total	Non-associated	Associated-Dissolved	Underground Storage[c]	
239,323	**19,910,353**	**194,916,624**	**134,189,882**	**55,838,660**	**4,888,082**	(1)
0	59,710	933,152	911,142	22,010	0	(2)
0	225,281	31,940,448	5,230,173	26,710,275	0	(3)
(611)	130,221	1,630,564	1,405,172	200,483	24,909	(4)
22,431	330,378	5,044,465	1,862,249	2,785,989	396,227	(5)
7,203	260,710	3,879,607	1,745,456	2,000,522	133,629	(6)
13,537	44,822	903,196	116,047	568,562	218,587	(7)
1,691	24,846	261,662	746	216,905	44,011	(8)
3,264	190,863	2,043,081	1,826,831	177,496	38,754	(9)
0	51,019	108,629	0	108,629	0	(10)
45,302	1,718	471,191	4,452	4,848	461,891	(11)
(4,122)	151	52,449	929	13	51,507	(12)
4,719	791,351	12,515,773	12,257,228	142,080	116,465	(13)
5,833	55,721	698,963	516,466	40,934	141,563	(14)
(4,028)	7,223,674	45,554,325	38,441,924	6,795,814	316,587	(15)
3,736	329,346	2,382,024	1,363,422	800,631	217,971	(16)
(7,764)	6,894,328	43,172,301	37,078,502	5,995,183	98,616	(17)
61,485	163,116	1,797,923	605,819	531,784	660,320	(18)
(7,003)	159,591	1,429,360	1,276,854	68,239	84,267	(19)
7,757	62,272	1,036,091	807,645	63,483	164,963	(20)
6,993	2,777	85,002	10,680	12,696	61,626	(21)
(7,648)	1,113,446	13,460,738	11,218,049	2,222,349	20,340	(22)
(99)	558,071	9,848,403	9,790,867	52,468	5,068	(23)
(7,549)	555,375	3,612,335	1,427,182	2,169,881	15,272	(24)
7,357	14,548	282,520	162,494	171	119,855	(25)
0	38,095	489,347	45,537	443,810	0	(26)
12,782	124,665	1,709,082	1,170,455	142,878	395,749	(27)
4,452	1,659,568	11,191,008	8,789,474	2,139,212	262,322	(28)
51,234	96,313	2,251,312	1,606,669	11,149	633,494	(29)
11,469	6,812,795	51,610,771	39,454,582	11,892,171	264,018	(30)
0	110,017	1,046,246	806,737	239,509	0	(31)
(453)	423,974	4,181,497	2,835,284	1,346,213	0	(32)
(14,336)	1,731,969	12,113,086	10,089,855	1,942,477	80,754	(33)
0	1,232,227	9,331,672	7,390,729	1,940,943	0	(34)
(3,776)	114,959	709,657	595,922	83,421	30,314	(35)
28,502	350,111	4,692,899	3,544,658	1,037,619	110,622	(36)
171	148,599	1,035,429	695,563	314,845	25,021	(37)
(13)	289,633	1,564,497	1,047,757	515,072	1,668	(38)
0	1,148,444	7,768,399	4,877,902	2,890,497	0	(39)
0	143,134	1,090,423	81,349	1,009,074	0	(40)
1,559	119,945	932,119	648,615	267,865	15,639	(41)
(185)	999,783	7,144,847	6,840,211	304,636	0	(42)
227	46,801	677,079	397,233	277,521	2,325	(43)
0	8,597	75,867	75,867	0	0	(44)
18,831	153,096	2,867,550	2,420,492	46,362	400,696	(45)
2,670	392,304	4,685,491	3,634,622	995,265	55,604	(46)
(4,071)	2,282	274,443	56,844	2,999	214,600	(47)
0	5,487,943	34,409,742	30,215,124	4,194,618	0	(48)

e. Reported quantities include reserves estimated to be recoverable from some reservoirs considered natural gas bearing based on electrical logs, core data and other available engineering and geological data.
f. Includes Arizona, Iowa, Maryland, Minnesota, Missouri, Oregon, South Dakota, Tennessee and Washington.
g. Included in Texas and Louisiana.
( ): Denotes negative volume.
Source: Same as Table 2.
***1980 data not available. See explanation on page 5.**

CHART 3

NET PRODUCTION AND NEW ADDITIONS TO GAS RESERVES *

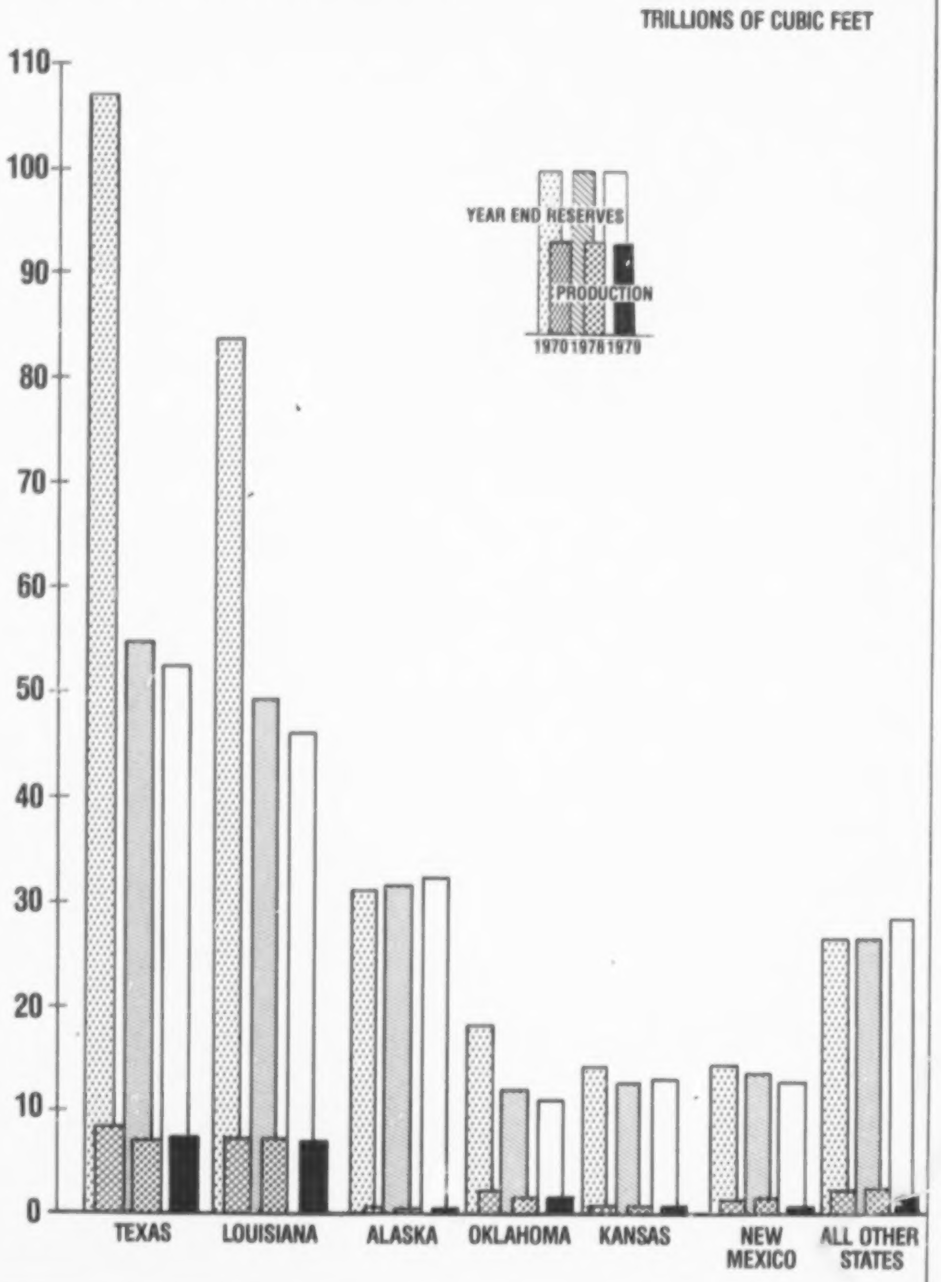


REFERENCE: TABLE 2

*1980 data not available. See explanation on page 5.

CHART 4

NATURAL GAS STATE RESERVES AND PRODUCTION FOR 1970, 1978 AND 1979 *



REFERENCE: TABLE 3

*1980 data not available. See explanation on page 5.

TABLE 2*

SUMMARY OF ANNUAL ESTIMATES OF PROVED RESERVES OF NATURAL GAS IN THE UNITED STATES, 1955–1979[a]

(Millions of cubic feet)

	Changes in Reserves during year										
Year	Extensions	Extensions and Revisions	Revisions	New Field Discoveries	Discoveries of New Fields and New Pools in Old Fields	New Reservoir Discoveries	Total of Discoveries, Revisions and Extensions	Net Change in Underground Storage	Preliminary Net Production during Year[c]	Estimated Proved Reserves as of End of Year	Change over Previous Year
1955	–	16,209,607	–	–	5,688,009	–	21,897,616	87,164	10,063,167	222,482,544	11,921,613
1956	–	19,110,251	–	–	5,605,864	–	24,716,115	133,241	10,848,685	236,483,215	14,000,671
1957	–	11,057,932	–	–	8,950,119	–	20,008,051	178,761	11,439,890	245,230,137	8,746,922
1958	–	13,316,100	–	–	5,580,624	–	18,896,724	57,582	11,422,651	252,761,792	7,531,655
1959	–	14,852,004	–	–	5,769,245	–	20,621,249	160,453	12,373,036	261,170,431	8,408,639
1960	–	7,293,015	–	–	6,600,963	–	13,893,978	281,273	13,019,356	262,326,326	1,155,895
1961	–	10,258,692	–	–	6,907,729	–	17,166,421	159,544	13,378,649	266,273,642	3,947,316
1962	–	13,184,794	–	–	6,299,164	–	19,483,958	159,231	13,637,973	272,278,858	6,005,216
1963	–	12,586,733	–	–	5,577,934	–	18,164,667	253,733	14,546,025	276,151,233	3,872,375
1964	–	13,342,838	–	–	6,909,301	–	20,252,139	195,110	15,347,028	281,251,454	5,100,221
1965	–	14,775,570	–	–	6,543,709	–	21,319,279	150,483	16,252,293	286,468,923	5,217,469
1966	9,224,745	–	4,937,962	2,947,329	–	3,110,396	20,220,432	134,523	17,491,073	289,332,805	2,863,882
1967	9,538,584	–	6,570,578	3,170,520	–	2,524,651	21,804,333	151,403	18,380,838	292,907,703	3,574,898
1968	7,758,821	–	3,016,146	1,376,429	–	1,545,612	13,697,008	118,569	19,373,428	287,349,852	(5,557,851)
1969	5,800,469	–	(1,238,261)	1,769,557	–	2,043,219	8,375,004	107,169	20,723,190	275,108,835	(12,241,017)
1970	6,158,168	–	(99,721)	27,770,223[b]	–	3,367,689	37,196,359	402,018	21,960,804	290,746,408	15,637,573
1971	6,374,706	–	(1,227,400)	1,317,574	–	3,360,541	9,825,421	310,301	22,076,512	278,805,618	(11,940,790)
1972	6,153,683	–	(1,077,791)	1,462,539	–	3,096,132	9,634,563	156,563	22,511,898	266,084,846	(12,720,772)
1973	6,177,286	–	(3,474,756)	2,152,151	–	1,970,368	6,825,049	(354,282)	22,605,406	249,950,207	(16,134,639)
1974	5,847,251	–	(1,333,285)	2,013,745	–	2,151,473	8,679,184	(178,424)	21,318,470	237,132,497	(12,817,410)
1975	6,027,433	–	383,449	2,423,382	–	1,649,424	10,483,688	302,561	19,718,570	228,200,176	(8,932,321)
1976	5,337,707	–	(1,197,119)	1,421,013	–	1,993,867	7,555,468	(187,550)	19,542,020	216,026,074	(12,174,102)
1977	6,601,229	–	983,551	2,114,505	–	2,152,639	11,851,924	446,930	19,447,050	208,877,878	(7,148,196)
1978	6,733,441	–	118,436	1,719,928	–	2,014,329	10,586,144	148,733	19,311,048	200,301,707	(8,576,171)
1979	7,113,113	–	2,907,551	2,575,779	–	1,689,504	14,285,947	239,323	19,910,353	194,916,624	(5,385,083)

a. Volumes are calculated at a pressure base of 14.73 psi, absolute, and at a standard temperature of 60°F.

b. Includes the estimates of proved reserves in the Prudhoe Bay Permo-triassic reservoir discovered in 1968 and not previously included.

c. "Preliminary Net Production" equals estimated gross withdrawals less (1) gas reinjected into producing reservoirs for cycling and pressure maintenance, and (2) natural gas liquids. "Preliminary Net Production" differs from U.S. Bureau of Mines "Marketed Production" in that (1) the sources from which they are derived are different, and (2) "Marketed Production" includes natural gas liquids.

( ): Denotes negative volume.

Source: A.G.A., American Petroleum Institute and Canadian Petroleum Association. *Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada as of December 31, 1979.*

***1980 data not yet available. See explanation on page 5.**

TABLE 4*

SUMMARY OF ANNUAL ESTIMATES OF PROVED RESERVES OF NATURAL GAS LIQUIDS IN THE UNITED STATES, 1955-1979[a]

(Thousands of barrels)

	Natural Gas Liquids added during year									
Year	Extensions	Extensions and Revisions	Revisions	New Field Discoveries	Discoveries of New Fields and New Pools in Old Fields	New Reservoir Discoveries	Total of Discoveries, Revisions and Extensions	Preliminary Net Production during Year	Estimated Proved Reserves as of End of Year	Change over Previous Year
1955	–	447,160	–	–	67,348	–	514,508	320,400	5,438,565	194,108
1956	–	715,764	–	–	94,056	–	809,820	346,053	5,902,332	463,767
1957	–	8,884	–	–	128,508	–	137,392	352,364	5,687,360	(214,972)
1958	–	749,956	–	–	108,250	–	858,206	341,548	6,204,018	516,658
1959	–	593,905	–	–	109,539	–	703,444	385,154	6,522,308	318,290
1960	–	603,621	–	–	121,509	–	725,130	431,379	6,816,059	293,751
1961	–	590,537	–	–	104,149	–	694,686	461,649	7,049,096	233,037
1962	–	580,570	–	–	151,979	–	732,549	470,128	7,311,517	262,421
1963	–	700,183	–	–	177,937	–	878,120	515,659	7,673,978	362,461
1964	–	457,702	–	–	151,042	–	608,744	536,090	7,746,632	72,654
1965	–	721,605	–	–	110,707	–	832,312	555,410	8,023,534	276,902
1966	131,583	–	634,233	53,378	–	74,922	894,116	588,684	8,328,966	305,432
1967	159,725	–	671,112	57,272	–	41,649	929,758	644,493	8,614,231	685,265
1968	155,940	–	469,689	26,642	–	33,388	685,659	701,782	8,598,108	(16,123)
1969	106,815	–	106,192	26,831	–	41,190	281,028	735,962	8,143,174	(454,934)
1970	103,740	–	35,446	34,234	–	134,159	307,579	747,812	7,702,941	(440,233)
1971	93,909	–	135,144	28,513	–	90,154	347,720	746,434	7,304,227	(398,714)
1972	112,537	–	38,796	32,652	–	54,288	238,273	755,941	6,786,559	(517,668)
1973	121,835	–	231,460	19,202	–	36,482	408,979	740,831	6,454,707	(331,852)
1974	149,996	–	393,484	36,095	–	40,266	619,841	724,099	6,350,449	(104,258)
1975	116,810	–	345,496	128,036	–	28,162	618,504	701,123	6,267,830	(82,619)
1976	158,572	–	614,356	20,460	–	41,378	834,766	700,629	6,401,967	134,137
1977	152,535	–	78,043	24,950	–	35,643	291,171	698,773	5,994,365	(407,602)
1978	153,181	–	365,813	31,427	–	45,245	595,666	664,179	5,925,852	(68,513)
1979	166,769	–	141,727	38,437	–	42,872	389,805	660,334	5,655,323	(270,529)

a. Includes condensate, natural gasoline and liquefied petroleum gases.
( ): Denotes negative volume.
Source: Same as Table 2.
***1980 data not available. See explanation on page 5.**

ENERGY RESERVES

TABLE 7*

CHANGES IN ESTIMATED PROVED RESERVES OF CRUDE OIL, IN THE UNITED STATES BY STATE, DURING 1979

(Thousands of barrels)

		Changes in Reserves during 1979					
State	Reserves as of December 31, 1978	Revisions	Extensions	New Fields Discovered	New Pools Discovered	Estimated Production	Reserves as of December 31, 1979
United States	**27,803,760**	**1,490,618**	**368,082**	**239,406**	**107,567**	**2,958,144**	**27,051,289**
Alabama	33,107	5,507	–	50	–	10,322	28,342
Alaska	9,247,356	187,946	–	–	–	511,327	8,923,975
Arkansas	94,038	27,515	3,981	–	110	18,414	107,230
California[a]	3,471,301	308,246	16,565	160,400	40,100	351,926	3,644,686
Coastal	601,756	50,014	3,340	10,400	40,000	59,616	645,894
L. A. Basin	879,222	(29,084)	1,100	150,000	–	88,298	912,940
San Joaquin	1,990,323	287,316	12,125	–	100	204,012	2,085,852
Colorado	198,012	(17,323)	1,566	1,267	190	31,652	152,060
Florida	169,361	1,316	–	–	–	47,967	122,710
Illinois	137,927	13,830	643	687	75	20,254	132,908
Indiana	26,515	1,074	945	78	1,616	4,733	25,495
Kansas	350,367	22,731	19,850	4,398	685	53,253	344,778
Kentucky	31,833	4,204	50	120	65	5,533	30,739
Louisiana[a]	2,893,401	(34,542)	56,118	18,388	34,986	413,230	2,555,121
North	208,742	36	1,840	125	–	27,788	182,955
South	2,684,659	(34,578)	54,278	18,263	34,986	385,442	2,372,166
Michigan	190,164	14,016	–	6,714	–	34,589	176,305
Mississippi	187,587	9,539	3,185	3,082	70	34,582	168,881
Montana	140,466	13,261	5,893	4,576	1,510	29,116	136,590
Nebraska	29,291	4,478	1,172	1,067	–	5,891	30,117
New Mexico	485,640	40,911	7,627	477	1,478	74,420	461,713
Northwest	16,826	170	2,100	45	–	3,968	15,173
Southeast	468,814	40,741	5,527	432	1,478	70,472	446,540
New York	8,996	1,500	–	–	–	855	9,641
North Dakota	161,213	16,230	16,671	5,815	4,655	29,389	175,195
Ohio	131,194	–	18,333	18	126	11,953	137,718
Oklahoma	1,073,469	4,570	50,129	3,105	2,500	128,441	1,005,332
Pennsylvania	48,156	5,288	218	–	–	2,816	50,846
South Dakota	2,738	1,010	–	–	–	801	2,947
Tennessee	2,489	(6)	590	146	–	614	2,605
Texas[a]	7,689,991	768,610	119,263	20,959	18,100	980,839	7,636,084
District 1	110,258	4,779	331	104	66	18,595	96,943
District 2	382,189	17,780	487	657	1,373	49,863	352,623
District 3	745,558	3,888	30,885	3,823	3,117	118,086	669,185
District 4	122,586	9,996	1,028	816	4,010	21,216	117,220
District 5	54,323	577	480	611	10	10,909	45,092
District 6	1,512,934	(137,901)	848	316	658	109,628	1,267,227
District 7B	188,922	(7,232)	10,350	2,931	1,809	27,511	169,269
District 7C	166,334	3,043	21,922	1,874	806	28,333	165,646
District 8	2,389,899	103,270	22,086	2,236	1,122	246,212	2,272,401
District 8A	1,694,063	704,884	14,677	2,003	3,290	301,989	2,116,928
District 9	187,714	43,527	8,656	2,807	1,649	32,495	211,858
District 10	135,211	21,999	7,513	2,781	190	16,002	151,692
Utah	155,371	10,827	1,000	3,701	325	26,882	144,342
West Virginia	29,675	302	410	–	–	2,465	27,922
Wyoming	804,567	79,215	43,723	4,357	965	124,062	808,765
Miscellaneous[b]	9,535	363	150	1	11	1,818	8,242
Gulf of Mexico[c]	1,749,464	124,606	45,554	17,335	26,128	255,503	1,707,584

a. Includes offshore reserves.
b. Includes Arizona, Missouri, Nevada, and Virginia.
c. Included in Texas and Louisiana.
( ): Denotes negative volume.
Source: Same as Table 2.
***1980 data not available. See explanation on page 5.**

TABLE 8
TOTAL ESTIMATED REMAINING IDENTIFIED RESERVES OF COAL AND LIGNITE BY STATE, AS OF JANUARY 1, 1976[a]

(Billions of short tons)

		Coal			
State	Total Coal and Lignite	Anthracite and Semianthracite	Subbituminous	Bituminous	Lignite
United States	**438.3**	**7.4**	**168.4**	**228.9**	**33.6**
Alabama	3.1			2.0	1.1
Alaska	6.2		5.4	0.7	b
Arizona	0.3			0.3	
Arkansas	0.4	0.1		0.3	b
Colorado	16.3	b	4.1	9.1	3.0
Georgia	b			b	
Idaho	b			b	
Illinois	68.0			68.0	
Indiana	10.7			10.7	
Iowa	2.2			2.2	
Kansas	1.0			1.0	
Kentucky	26.0			26.0	
Maryland	1.0			1.0	
Michigan	0.1			0.1	
Missouri	5.0			5.0	
Montana	120.6		103.4	1.4	15.8
New Mexico	4.6	b	2.7	1.9	
North Carolina	b			b	
North Dakota	10.1				10.1
Ohio	19.2			19.2	
Oklahoma	1.6			1.6	
Oregon	b		b		
Pennsylvania	30.8	7.1		23.7	
South Dakota	0.4				0.4
Tennessee	1.0			1.0	
Texas	3.2				3.2
Utah	6.6		b	6.6	
Virginia	4.3	0.1		4.2	
Washington	1.6		1.3	0.3	b
West Virginia	38.6			38.6	
Wyoming	55.4		51.4	4.0	

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a. Figures are for resources in the ground, about half of which may be considered recoverable. Includes beds of bituminous coal and anthracite 28 in. or more thick and beds of subbituminous coal and lignite 5 ft. or more thick.

b. Less than 50 million short tons.

Source: U.S. Department of the Interior, Bureau of Mines, *The Demonstrated Reserve Base of Coals in the United States*, January 1, 1976.

TABLE 10

ESTIMATED ESTABLISHED REMAINING MARKETABLE RESERVES OF NATURAL GAS IN CANADA, BY PROVINCE, 1980*

(Millions of cubic feet)

			Remaining Reserves At December 31, 1980				
				Net			
Province	Remaining Reserves December 31, 1979	Change During Year	Total	Non-associated	Associated	Dissolved	Under ground Storage
Canada	**88,594,374**	**(148,825)**	**88,445,549**	**79,199,149**	**6,355,791**	**2,633,378**	**227,231**
Total West, Canada	**88,277,841**	**(126,926)**	**88,150,915**	**79,077,370**	**6,354,584**	**2,663,378**	**55,583**
Alberta	58,436,593	534,181	58,970,774	50,430,273	6,004,119	2,486,442	49,940
Artic Islands	14,112,982	(605,807)	13,507,175	13,507,175	–	–	–
Br. Columbia	7,360,086	47,243	7,407,329	6,979,097	304,288	123,944	–
Mackenzie Delta	6,535,212	–	6,535,212	6,535,212	–	–	–
Mainland Territories	575,389	(39,362)	536,027	536,027	–	–	–
Saskatchewan	1,257,579	(63,181)	1,194,398	1,089,586	46,177	52,992	5,643
Total East, Canada	**316,533**	**(21,899)**	**294,634**	**121,779**	**1,207**	–	**171,648**
Ontario	304,749	(21,686)	283,063	111,415	–	–	171,648
Other E. Canada	11,784	(213)	11,571	10,364	1,207	–	–

*Volumes are calculated at a pressure base of 14.65 psia and at a standard temperature of 60°F.
( ): Denotes negative volume.
Source: Same as Table 9.

TABLE 11

CHANGES IN ESTIMATED ESTABLISHED REMAINING MARKETABLE RESERVES OF NATURAL GAS IN CANADA, BY PROVINCE, DURING 1980*

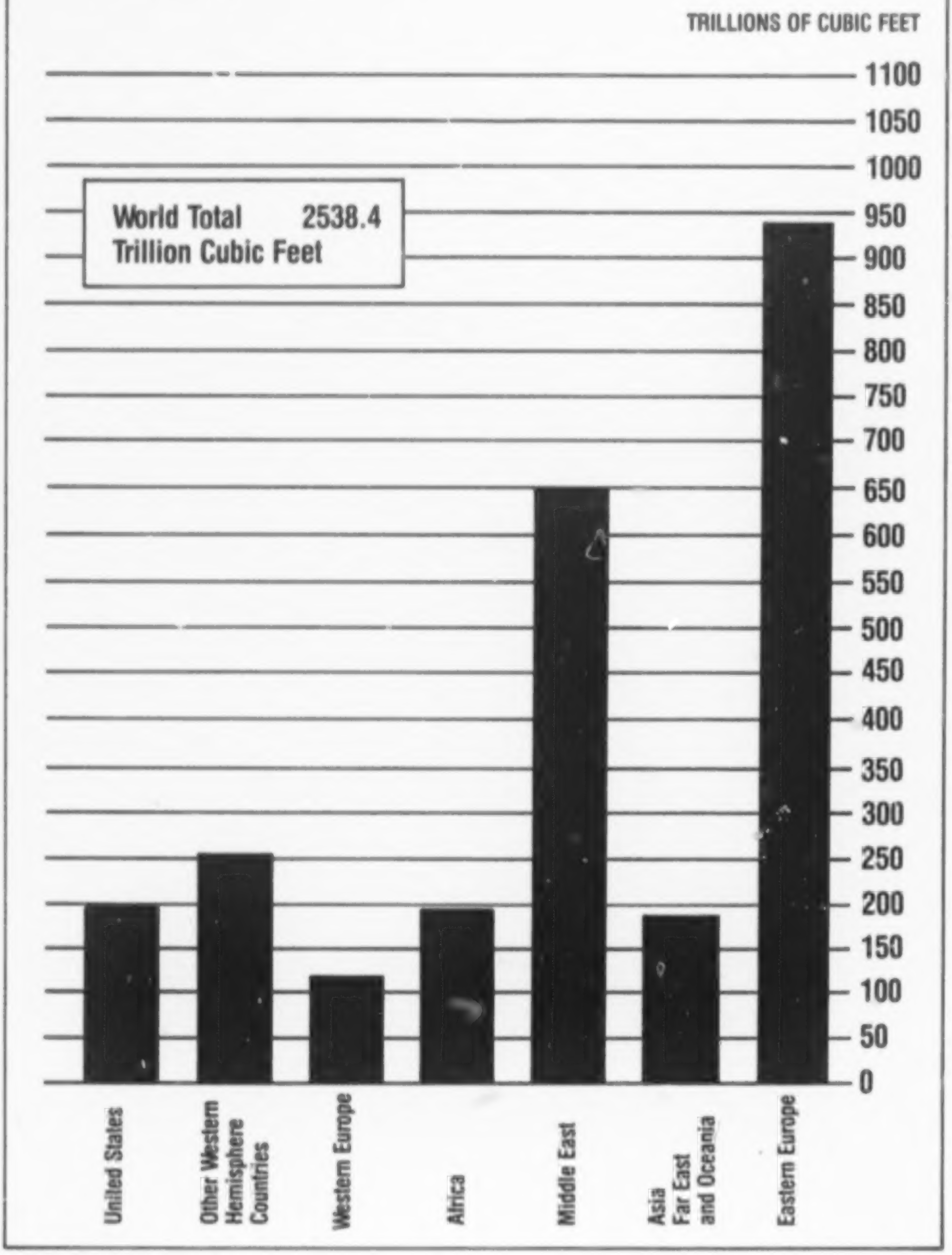
(Millions of cubic feet)

		Changes in Reserves during 1980					
Province	Remaining Reserves December 31, 1979	Revisions	Extensions	Discoveries	Net Change in Underground Storage	Net Production	Remaining Reserves December 31, 1980
Canada	**88,594,374**	**62,043**	**1,408,320**	**900,050**	**(33,222)**	**2,486,016**	**88,445,549**
Total West, Canada	**88,277,841**	**50,898**	**1,408,320**	**890,751**	**(6,921)**	**2,469,973**	**88,150,915**
Alberta	58,436,593	1,075,815	1,235,714	399,269	(3,798)	2,172,820	58,970,774
Artic Islands	14,112,982	(967,843)	–	362,036	–	–	13,507,175
Br. Columbia	7,360,086	(17,321)	172,606	129,446	–	237,484	7,407,329
Mackenzie Delta	6,535,212	–	–	–	–	–	6,535,212
Mainland Territories	575,389	(28,927)	–	–	–	10,435	536,027
Saskatchewan	1,257,579	(10,826)	–	–	(3,123)	49,230	1,194,398
Total East, Canada	**316,533**	**11,145**	–	**9,299**	**(26,301)**	**16,043**	**294,634**
Ontario	304,749	11,145	–	9,299	(26,301)	15,830	283,063
Other E. Canada	11,784	–	–	–	–	213	11,571

*Volumes are calculated at a pressure base of 14.65 psia and at a standard temperature of 60°F.
( ): Denotes negative volume.
Source: Same as Table 9.

CHART 5

WORLD ESTIMATED NATURAL GAS RESERVES, 1979



SOURCE: WORLD OIL, AUGUST 15, 1980

SECTION III
NATURAL GAS SUPPLY

	1980	% Change 80/79
Maximum Day Sendout (Trillions of Btu)	76.1	− 9.2
Production (wet) (Trillions of Btu)	22,017	− 1.5
Net Imports (Millions of cubic feet)	936,036	−21.8
Producing Gas Wells	175,213	+ 3.1
New Gas Well Completions	15,730	+ 7.1

TABLE 5*

CHANGES IN ESTIMATED PROVED RECOVERABLE RESERVES OF NATURAL GAS LIQUIDS, IN THE UNITED STATES BY STATE, DURING 1979[a]

(Thousands of barrels)

Division and State	Reserves as of December 31, 1978	Changes in Reserves during 1979					Reserves as of December 31, 1979		
		Revisions	Extensions	New Field Discoveries	New Reservoir Discoveries	Preliminary Net Production	Total	Non-Associated	Associated-Dissolved
United States	**5,925,852**	**141,727**	**166,769**	**38,437**	**42,872**	**660,334**	**5,655,323**	**3,558,342**	**2,096,981**
Alabama	204,065	217	4,993	319	0	11,689	197,905	196,251	1,654
Alaska	407,791	3	0	0	0	635	407,159	0	407,159
Arkansas	5,361	7,973	545	63	86	1,188	12,840	830	12,010
California[b]	102,321	(4,813)	927	147	82	9,311	89,396	1,371	88,025
San Joaquin Basin	79,612	(4,546)	793	0	82	6,504	69,437	744	68,693
Coastal Region[b]	12,272	(692)	139	147	0	1,668	10,198	627	9,571
L.A. Basin[b]	10,437	425	38	0	0	1,139	9,761	0	9,761
Colorado	61,199	1,257	634	1,047	0	8,689	55,448	40,328	15,120
Florida	21,490	4,997	0	0	0	8,795	17,692	0	17,692
Illinois	0	0	0	0	0	0	0	0	0
Indiana	0	0	0	0	0	0	0	0	0
Kansas	463,761	25,982	9,213	916	343	29,992	470,223	461,852	8,371
Kentucky	39,253	0	2,089	120	87	3,530	38,019	38,019	0
Louisiana[b,c]	1,315,545	(23,944)	47,252	13,472	26,065	192,358	1,186,032	1,045,267	140,765
North	52,521	6,518	5,874	156	390	12,558	52,901	34,259	18,642
South[b,c]	1,263,024	(30,462)	41,378	13,316	25,675	179,800	1,133,131	1,011,008	122,123
Michigan	65,693	13,587	0	2,278	0	10,032	71,526	28,245	43,281
Mississippi	12,707	1,064	266	301	51	2,385	12,004	10,660	1,344
Montana	3,299	0	0	0	0	380	2,919	2,329	590
Nebraska	457	160	0	0	0	116	501	163	338
New Mexico	451,672	25,591	298	2	0	38,314	439,249	320,219	119,030
Northwest	291,736	14,718	0	0	0	16,366	290,088	290,088	0
South	159,936	10,873	298	2	0	21,948	149,161	30,131	119,030
North Dakota	54,126	(32)	900	500	65	1,804	53,755	1,465	52,290
Ohio	0	0	0	0	0	0	0	0	0
Oklahoma	268,670	31,343	19,284	837	528	45,140	275,522	184,100	91,422
Pennsylvania	323	0	0	0	0	57	266	266	0
Texas[b]	2,268,284	53,624	64,643	17,850	15,565	280,215	2,139,751	1,089,768	1,049,983
District 1	26,253	4,252	1,092	252	224	3,386	28,687	20,986	7,701
District 2	92,660	715	491	901	1,496	9,128	87,135	53,528	33,607
District 3[b]	263,521	7,170	2,492	6,400	685	37,918	242,350	150,038	92,312
District 4[b]	322,273	(34,866)	3,737	4,015	10,918	33,890	272,187	217,692	54,495
District 5	64,315	(2,090)	513	418	4	3,371	59,789	52,636	7,153
District 6	310,184	2,096	9,973	3,124	489	25,713	300,153	113,839	186,314
District 7B	69,960	(3,226)	17,001	1,040	541	12,635	72,681	7,804	64,877
District 7C	91,594	3,000	933	0	0	16,204	79,323	31,683	47,640
District 8	433,259	8,407	6,923	109	28	49,390	399,336	126,644	272,692
District 8A	222,513	32,833	961	12	24	33,681	222,662	539	222,123
District 9	58,038	3,462	2,518	555	397	8,434	56,534	19,034	37,500
District 10	313,714	31,871	18,011	1,024	759	46,465	318,914	295,345	23,569
Utah	31,714	(949)	0	0	0	2,573	28,192	578	27,614
West Virginia	96,279	0	12,413	0	0	4,904	103,788	103,788	0
Wyoming	51,842	5,667	3,269	585	0	8,227	53,136	32,843	20,293
Gulf of Mexico[d]	693,217	11,047	19,103	13,602	16,234	89,293	663,910	583,649	80,261

a. Includes condensate, natural gasoline and liquefied petroleum gases.

b. Includes offshore reserves.

c. Reported quantities include reserves estimated to be recoverable from some reservoirs considered natural gas bearing based on electrical logs, core data and other available engineering and geological data.

d. Included in Texas and Louisiana.

( ): Denotes negative volume.

Source: Same as Table 2.

***1980 data not available. See explanation on page 5.**

TABLE 6*

SUMMARY OF ESTIMATED PROVED RESERVES OF CRUDE OIL IN THE UNITED STATES, 1955-1979

(Thousands of barrels)

	New Oil Added During Year					
Year	Through Revisions of Previous Estimates and Extensions to Known Fields	Through New Pools Discovered during Year	Total through New Discoveries, Extensions, and Revisions	Production during Year	Estimated Proved Reserves as of End of Year	Change over Previous Year
1955	2,393,767	476,957	2,870,724	2,419,300	30,012,170	451,424
1956	2,507,114	467,222	2,974,336	2,551,857	30,434,649	422,479
1957	2,008,603	416,197	2,424,800	2,559,044	30,300,405	(134,244)
1958	2,293,513	314,729	2,608,242	2,372,730	30,535,917	235,512
1959	3,297,383	369,362	3,666,745	2,483,315	31,719,347	1,183,430
1960	2,111,472	253,856	2,365,328	2,471,464	31,613,211	(106,136)
1961	2,296,193	361,374	2,657,567	2,512,273	31,758,505	145,294
1962	1,800,310	380,586	2,180,896	2,550,178	31,389,223	(369,282)
1963	1,824,219	349,891	2,174,110	2,593,343	30,969,990	(419,233)
1964	2,318,474	346,293	2,664,767	2,644,247	30,990,510	20,520
1965	2,576,132	471,947	3,048,079	2,686,198	31,352,391	361,881
1966	2,653,556	310,422	2,963,978	2,864,242	31,452,127	99,736
1967	2,617,436	344,686	2,962,122	3,037,579	31,376,670	(75,457)
1968	2,096,889	357,746	2,454,635	3,124,188	30,707,117	(669,553)
1969	1,872,852	247,184	2,120,036	3,195,291	29,631,862	(1,075,255)
1970	2,720,281	9,968,637[a]	12,688,918	3,319,445	39,001,335	9,369,473
1971	2,161,022	156,710	2,317,732	3,256,110	38,062,957	(938,378)
1972	1,279,418	278,430	1,557,848	3,281,397	36,339,408	(1,723,549)
1973	1,941,918	203,913	2,145,831	3,185,400	35,299,839	(1,039,569)
1974	1,679,847	313,726	1,993,573	3,043,456	34,249,956	(1,049,883)
1975	1,017,399	301,064	1,318,463	2,886,292	32,682,127	(1,567,829)
1976	954,938	130,353	1,085,291	2,825,252	30,942,166	(1,739,961)
1977	1,134,685	269,095	1,403,780	2,859,544	29,486,402	(1,455,764)
1978	1,073,779	273,477	1,347,256	3,029,898	27,803,760	(1,682,642)
1979	1,858,700	346,973	2,205,673	2,958,144	27,051,289	(752,471)

a. Includes the estimates of proved reserves in the Prudhoe Bay Permo-triassic reservoir discovered in 1968 and not previously included.
( ): Denotes negative volume.
Source: Same as Table 2.
***1980 data not available. See explanation on page 5.**

TABLE 9

SUMMARY OF ANNUAL ESTIMATES OF RESERVES OF NATURAL GAS IN CANADA, 1964–1980[a]

(Millions of cubic feet)

	Reserves Remaining at Beginning of Year	Changes Due To						Reserves Remaining at End of Year	Change During Year	Probable Remaining at End of Year[b]
		Revisions	Revisions and Extensions	Extensions	Discoveries	Net Change in Underground Storage	Net Production			
MARKETABLE GAS[c]										
1964	32,992,252	–	–	–	–	–	–	39,319,544	6,327,292	45,572,431
1965	39,319,544	–	–	–	–	–	–	40,354,527	1,034,983	46,434,950
1966	40,354,527	2,158,536	–	1,532,317	512,086	17,918	1,125,289	43,450,095	3,095,568	49,269,076
1967	43,450,095	1,572,424	–	1,268,002	603,459	4,120	1,216,049	45,682,051	2,231,956	50,945,169
1968	45,682,051	230,116	–	2,867,357	282,913	(1,255)	1,394,721	47,666,461	1,948,410	54,185,935
1969	47,666,461	2,043,815	–	2,690,603	1,104,452	2,197	1,556,533	51,950,995	4,284,534	57,467,963
1970	51,950,995	493,804	–	2,516,126	193,682	20,205	1,799,184	53,375,628	1,424,633	60,289,373
1971	53,375,628	983,556	–	2,280,205	775,500	65	1,953,104	55,461,850	2,086,222	61,964,760
1972	55,461,850	(2,004,125)	–	1,243,897	487,538	(5,580)	2,247,798	52,935,782	(2,526,068)	60,546,769
1973	52,935,782	(167,054)	–	1,257,243	686,714	70,097	2,325,350	52,457,432	(478,350)	60,801,088
1974	52,457,432	2,953,557	–	3,487,099	193,056	10,428	2,393,486	56,708,086	4,250,654	64,459,133
1975	56,708,086	(177,606)	–	2,412,582	362,895	29,869	2,361,110	56,974,716	266,630	71,466,773
1976	56,974,716	(367,880)	–	3,587,990	639,345	(11,053)	2,541,176	58,281,942	1,307,226	76,359,832
1977	58,281,942	1,432,871	–	1,852,325	351,007	46,730	2,492,849	59,472,026	1,190,084	78,031,771
ESTABLISHED RESERVES[c]										
1977	76,835,973	d	–	d	d	46,709	2,492,850	79,180,390	2,344,416	–
1978	79,180,390	2,026,962	–	2,534,342	1,018,734	3.443	2,340,406	82,423,467	3,243,077	–
1979	82,423,467	3,012,475	–	2,062,527	3,347,747	10,613	2,263,030	88,593,799	6,170,332	–
1980	88,594,374	62,043	–	1,408,320	900,050	(33,222)	2,486,016	88,445,549	(148,825)	–

a. Volumes are calculated at a pressure base of 14.65 psia and at a standard temperature of 60°F.
b. Includes proved reserves.
c. For definitions refer to Glossary.
d. Not available.
( ): Denotes negative volume.
Source: Canadian Petroleum Association, *News Release*, April 2, 1981.

GAS FACTS

TABLE 12

GAS UTILITY INDUSTRY, GAS SUPPLY AND DISPOSITION, 1955-1980[a]

(Trillions of Btu)

	Amount							
	1955	1960	1965	1970	1975	1978	1979	1980
Supply – Produced and Purchased – Total	**7,531.0**	**10,544.6**	**13,315.9**	**18,829.5**	**16,811.5**	**16,274.9**	**17,068.4**	**17,276.4**
Natural	7,531.0	10,544.6	13,315.9	18,661.8	16,490.1	15,860.5	16,520.2	16,935.3
Manufactured	b	b	b	75.6	19.3	13.3	13.1	8.8
Liquefied Petroleum Gas	b	b	b	26.9	24.8	25.2	18.0	17.9
Substitute Natural Gas	b	b	b	1.2	261.3	297.5	281.2	198.4
Liquefied Natural Gas	b	b	b	0.0	8.4	56.2	202.6	79.6
Unclassified	b	b	b	64.0	7.6	22.2	33.3	36.4
Disposition – Total	**7,531.0**	**10,544.6**	**13,315.9**	**18,829.5**	**16,811.5**	**16,274.9**	**17,068.4**	**17,276.4**
Used in Production of Other Gases[c]	311.0	215.9	126.7	125.4	124.2	77.9	65.3	95.0
Company Use as a Fuel[d]	557.7	757.6	995.7	1,380.1	1,089.3	817.8	919.6	1,278.7
Sales to Ultimate Consumers	6,300.8	9,054.6	11,842.0	16,043.5	14,862,9	14,748.4	15,440.3	15,409.4
Other Deliveries (Net)	56.8	54.9	89.6	70.1	83.9	66.8	55.6	85.8
Placed in Storage (Net)	64.4	164.7	67.6	473.6	348.8	170.7	291.6	16.9
Unaccounted For[e]	240.3	296.9	194.3	736.8	302.4	393.3	296.0	390.6

a. Includes Natural Gas only prior to 1970.
b. Not available.
c. Includes Natural Gas used for enriching, reforming and mixing.
d. Includes interdepartmental transfers.
e. Represents difference between supply and disposition, and should not be interpreted as a reliable measure of transmission efficiency.

TABLE 13

GAS UTILITY INDUSTRY, MAXIMUM AND MINIMUM DAY SENDOUT[a] BY SOURCE OF SUPPLY, 1973-1980[b]

(Trillions of Btu)

	1973	1974	1975	1976	1977	1978	1979	1980
Maximum Day Sendout – Total	**75.2**	**74.1**	**74.6**	**78.9**	**81.8**	**92.1**	**83.8**	**76.1**
Peak Shaving Facilities	1.3	1.0	0.9	1.9	3.7	3.4	2.0	1.3
Underground Storage Withdrawal	29.7	29.1	31.4	36.3	37.3	36.3	38.3	38.3
Regular Production and Purchases	44.2	44.0	42.3	40.7	40.8	52.4	43.5	36.5
Minimum Day Sendout – Total	**22.0**	**21.6**	**19.9**	**19.3**	**17.0**	**16.3**	**17.8**	**16.0**
Average Day Sendout – Total	**45.2**	**43.8**	**40.7**	**40.6**	**39.3**	**40.4**	**42.3**	**42.2**

a. Represents summation of all companies maximum/minimum day sendout.
b. Excludes sendout of pipeline companies to avoid duplication. Underground storage withdrawals include amounts from fields operated by both distributors and pipelines.

TABLE 15
GROSS PRODUCTION OF NATURAL GAS, BY STATE, 1955-1979[a]

(Millions of cubic feet)

Division and State	1955	1965	1970	1975	1978	1979
United States	**11,719,794**	**17,963,100**	**23,786,453**	**21,103,530**	**21,308,815**	**21,883,353**
New England	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**103,800**	**88,240**	**80,472**	**92,400**	**111,663**	**111,813**
New Jersey	0	0	0	0	0	0
New York	4,000	3,340	3,358	7,628	13,900	15,500
Pennsylvania	99,800	84,900	77,114	84,772	97,763	96,313
East North Central	**92,000**	**82,700**	**97,276**	**191,497**	**268,745**	**291,460**
Illinois	40,400	7,500	4,972	1,440	1,159	1,585
Indiana	4,500	2,400	153	346	163	350
Michigan	12,100	36,900	40,038	103,901	152,184	164,860
Ohio	35,000	35,900	52,113	85,810	115,239	124,665
Wisconsin	0	0	0	0	0	0
West North Central	**558,500**	**866,900**	**965,535**	**877,137**	**897,240**	**849,690**
Iowa	0	0	0	0	0	0
Kansas	525,000	806,800	904,475	846,164	857,071	800,163
Minnesota	0	0	0	0	0	0
Missouri	b	b	b	30	0	0
Nebraska	18,000	12,100	6,309	3,963	2,882	3,208
North Dakota	15,500	48,000	54,751	26,941	37,287	45,400
South Dakota	0	0	b	39	0	919
South Atlantic	**218,084**	**211,060**	**246,599**	**205,683**	**208,739**	**209,267**
Delaware	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0
Florida	b	b	b	44,383	51,595	50,190
Georgia	0	0	0	0	0	0
Maryland	3,116	408	813	93	88	28
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	968	3,152	2,805	6,723	8,492	8,544
West Virginia	214,000	207,500	242,981	154,484	148,564	150,505
East South Central	**342,000**	**277,300**	**234,912**	**192,544**	**310,020**	**344,196**
Alabama	b	b	b	38,921	90,012	90,695
Kentucky	76,000	79,100	77,892	60,511	70,044	59,520
Mississippi	266,000	198,200	157,020	92,500	148,482	192,376
Tennessee	b	b	b	612	1,482	1,605
West South Central	**8,794,000**	**14,022,900**	**19,469,337**	**17,073,397**	**16,647,141**	**17,038,145**
Arkansas	55,000	104,000	183,650	121,518	127,954	127,469
Louisiana	1,948,000	4,764,300	8,076,157	7,242,408	7,638,931	7,358,795
Oklahoma	955,000	1,414,000	1,811,004	1,720,698	1,892,413	1,958,337
Texas	5,836,000	7,740,600	9,398,526	7,988,773	6,987,843	7,593,544
Mountain	**808,900**	**1,492,500**	**1,744,236**	**1,849,992**	**1,884,932**	**1,968,293**
Arizona	b	b	b	255	286	348
Colorado	97,000	155,200	115,157	174,145	185,019	192,694
Idaho	0	0	0	0	0	0
Montana	29,000	29,800	48,302	44,547	48,497	56,094
Nevada	0	0	0	0	0	0
New Mexico	565,000	956,500	1,141,889	1,227,200	1,198,593	1,200,469
Utah	17,900	92,100	73,386	77,607	80,227	78,674
Wyoming	100,000	258,900	365,502	326,238	372,310	440,014
Pacific	**802,000**	**917,800**	**945,099**	**620,880**	**980,335**	**1,070,489**
Alaska	0	12,800	217,854	253,227	596,834	732,990
California	802,000	905,000	727,245	367,653	383,501	337,497
Hawaii	0	0	0	0	0	0
Oregon	0	0	0	0	0	2
Washington	0	0	0	0	0	0
Other States	**510**	**3,700**	**2,987**	**0**	**0**	**0**

a. Includes gas (mostly residue gas) blown to the air, but does not include direct waste on producing properties, except where data are available.
b. Included in "Other States."
Source: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual*.

TABLE 16
NET WELLHEAD PRODUCTION OF NATURAL GAS, BY STATE, 1955-1979[a]

(Millions of cubic feet)

Division and State	1955	1965	1970	1975	1978	1979
United States	**10,178,990**	**16,358,896**	**22,410,102**	**20,242,574**	**20,127,383**	**20,638,279**
New England	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**103,653**	**87,842**	**80,199**	**92,400**	**111,663**	**111,813**
New Jersey	0	0	0	0	0	0
New York	4,000	3,340	3,358	7,628	13,900	15,500
Pennsylvania	99,653	84,502	76,841	84,772	97,763	96,313
East North Central	**89,101**	**80,800**	**96,898**	**190,471**	**266,203**	**288,057**
Illinois	39,763	7,500	4,972	1,440	1,159	1,585
Indiana	4,463	2,400	153	346	163	350
Michigan	9,930	35,000	39,660	103,725	150,783	162,691
Ohio	34,945	35,900	52,113	84,960	114,098	123,431
Wisconsin	0	b	0	0	0	0
West North Central	**555,971**	**860,204**	**963,410**	**875,409**	**895,514**	**848,090**
Iowa	0	0	0	0	0	0
Kansas	522,826	806,683	902,668	844,471	855,345	798,563
Minnesota	0	0	0	0	0	0
Missouri	b	b	b	30	0	0
Nebraska	17,645	11,985	5,991	3,963	2,882	3,208
North Dakota	15,500	41,536	54,751	26,941	37,287	45,400
South Dakota	0	0	b	5	0	919
South Atlantic	**217,968**	**211,044**	**246,070**	**205,683**	**208,739**	**209,267**
Delaware	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0
Florida	b	b	b	44,383	51,595	50,190
Georgia	0	0	0	0	0	0
Maryland	3,116	408	813	93	88	28
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	968	3,152	2,805	6,723	8,492	8,544
West Virginia	213,884	207,484	242,452	154,484	148,564	150,505
East South Central	**279,323**	**255,601**	**211,156**	**186,251**	**300,775**	**330,393**
Alabama	b	b	b	38,921	87,294	87,312
Kentucky	75,921	79,100	77,892	60,511	70,044	59,520
Mississippi	203,402	176,501	133,264	86,207	142,852	182,494
Tennessee	b	b	b	612	585	1,067
West South Central	**7,614,965**	**12,769,359**	**13,306,535**	**16,387,930**	**15,988,776**	**16,466,145**
Arkansas	38,351	83,845	181,577	117,555	107,661	109,923
Louisiana	1,746,236	4,589,349	7,942,365	7,116,104	7,506,304	7,292,278
Oklahoma	829,055	1,356,738	1,724,572	1,637,212	1,801,071	1,861,971
Texas	5,001,323	6,739,427	8,458,021	7,517,059	6,573,740	7,201,973
Mountain	**770,995**	**1,416,853**	**1,705,299**	**1,813,914**	**1,832,089**	**1,909,773**
Arizona	b	b	b	255	286	348
Colorado	68,863	131,342	112,930	174,145	184,801	192,438
Idaho	0	0	0	0	0	0
Montana	28,873	29,221	47,908	43,936	47,930	55,577
Nevada	0	0	0	0	0	0
New Mexico	562,227	945,794	1,141,889	1,219,072	1,182,361	1,185,999
Utah	17,900	72,306	45,633	57,160	58,885	59,165
Wyoming	93,132	238,190	356,939	319,346	357,826	416,246
Pacific	**546,504**	**673,493**	**798,000**	**490,516**	**523,624**	**474,741**
Alaska	0	7,331	146,384	170,671	211,580	225,280
California	546,504	666,162	651,616	319,845	312,044	249,459
Hawaii	0	0	0	0	0	0
Oregon	0	0	0	0	0	2
Washington	0	0	0	0	0	0
Other States	**510**	**3,700**	**2,535**	**0**	**0**	**0**

a. As defined by A.G.A. "Net Wellhead Production" equals "Gross Production" less gas for repressuring (see Table 14) and therefore includes natural gas liquids.

b. Included in "Other States."

Source: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual.*

TABLE 17
MARKETED PRODUCTION OF NATURAL GAS, BY STATE, 1955-1979

(Millions of cubic feet)

Division and State	1955	1965	1970	1975	1978	1979
United States	**9,405,351**	**16,039,753**	**21,920,687**	**20,108,661**	**19,974,033**	**20,471,260**
New England	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**102,809**	**87,801**	**80,199**	**92,304**	**111,663**	**111,813**
New Jersey	0	0	0	0	0	0
New York	3,637	3,340	3,358	7,628	13,900	15,500
Pennsylvania	99,172	84,461	76,841	84,676	97,763	96,313
East North Central	**51,315**	**77,877**	**95,967**	**188,859**	**263,467**	**285,097**
Illinois	8,033	7,396	4,850	1,440	1,159	1,585
Indiana	1,226	239	153	346	163	350
Michigan	8,300	34,558	38,851	102,113	148,047	159,731
Ohio	33,756	35,684	52,113	84,960	114,098	123,431
Wisconsin	0	0	0	0	0	0
West North Central	**488,812**	**839,751**	**940,922**	**871,006**	**887,865**	**820,352**
Iowa	0	0	0	0	0	0
Kansas	471,041	793,379	899,955	843,625	854,484	797,762
Minnesota	0	0	0	0	0	0
Missouri	*	*	87	30	0	0
Nebraska	12,515	10,720	5,991	2,565	2,882	3,208
North Dakota	5,256	35,652	34,889	24,786	30,499	18,468
South Dakota	0	*	0	0	0	914
South Atlantic	**216,487**	**210,976**	**246,115**	**205,683**	**208,739**	**209,267**
Delaware	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0
Florida	*	*	0	44,383	51,595	50,190
Georgia	0	0	0	0	0	0
Maryland	3,116	408	813	93	88	28
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	968	3,152	2,850	6,723	8,492	8,544
West Virginia	212,403	207,416	242,452	154,484	148,564	150,505
East South Central	**236,381**	**245,801**	**204,614**	**172,697**	**262,690**	**290,353**
Alabama	*	*	627	37,814	85,599	85,815
Kentucky	73,214	78,976	77,892	60,511	70,044	59,520
Mississippi	163,167	166,825	126,031	74,345	106,579	144,077
Tennessee	*	*	64	27	468	941
West South Central	**7,057,929**	**12,507,167**	**17,922,286**	**16,298,056**	**15,905,055**	**16,385,658**
Arkansas	32,123	82,831	181,351	116,237	106,792	109,452
Louisiana	1,680,032	4,466,786	7,788,276	7,090,645	7,476,497	7,266,217
Oklahoma	614,976	1,320,995	1,594,943	1,605,410	1,773,582	1,835,366
Texas	4,730,798	6,636,555	8,357,716	7,485,764	6,548,184	7,174,623
Mountain	**713,053**	**1,399,156**	**1,669,891**	**1,801,478**	**1,820,382**	**1,899,758**
Arizona	*	*	1,101	208	286	247
Colorado	49,152	126,381	105,804	171,629	183,693	191,239
Idaho	0	0	0	0	0	0
Montana	28,255	28,105	42,705	40,734	46,522	53,888
Nevada	0	0	0	0	0	0
New Mexico	540,664	937,205	1,138,980	1,217,430	1,174,198	1,181,363
Utah	17,163	71,616	42,781	55,354	58,416	58,605
Wyoming	77,819	235,849	338,520	316,123	357,267	414,416
Pacific	**538,178**	**667,639**	**760,693**	**478,578**	**514,172**	**468,962**
Alaska	0	7,255	111,576	160,270	203,088	220,754
California	538,178	660,384	649,117	318,308	311,084	248,206
Hawaii	0	0	0	0	0	0
Oregon	0	0	0	0	0	2
Washington	0	0	0	0	0	0
Other States	**387**	**3,585**	**0**	**0**	**0**	**0**

*Included in "Other States."
Source: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual.*

TABLE 18
NATURAL GAS DELIVERED TO CONSUMERS BY STATE, 1955-1979[a]

(Millions of cubic feet)

Division and State	1955	1965	1970	1975	1978	1979
United States	**7,317,426**	**13,622,968**	**19,018,462**	**17,588,353**	**17,449,116**	**18,141,267**
New England	**63,358**	**175,051**	**242,507**	**254,070**	**262,220**	**265,770**
Connecticut	14,130	40,722	60,524	63,968	65,151	67,898
Maine	0	0	10,691[b]	13,534[b]	14,039[b]	14,881[b]
Massachusetts	42,730	113,994	146,226	153,461	160,000	155,808
New Hampshire	1,206	4,084	c	c	c	c
Rhode Island	5,292	16,251	25,066	23,107	23,030	27,183
Vermont	0	0	c	c	c	c
Middle Atlantic	**695,487**	**1,357,337**	**1,772,600**	**1,451,698**	**1,441,712**	**1,591,303**
New Jersey	74,424	209,306	321,910	243,714	228,339	260,025
New York	242,144	540,672	707,219	573,699	566,198	619,576
Pennsylvania	378,919	607,359	743,471	634,285	647,175	711,702
East North Central	**1,225,971**	**2,706,665**	**3,843,966**	**3,718,831**	**3,658,817**	**3,691,805**
Illinois	365,443	742,906	1,145,379	1,080,787	1,161,536	1,123,836
Indiana	122,501	349,827	534,214	467,736	436,085	494,333
Michigan	203,183	548,390	795,317	865,539	774,943	848,612
Ohio	494,627	866,589	1,037,801	944,925	917,194	861,391
Wisconsin	40,217	198,953	331,255	359,844	369,059	363,633
West North Central	**805,965**	**1,398,950**	**1,826,005**	**1,686,051**	**1,537,634**	**1,637,700**
Iowa	132,050	236,443	330,363	329,703	233,298	280,749
Kansas	242,012	385,364	481,483	402,273	425,698	481,956
Minnesota	123,606	247,561	334,872	327,315	309,570	323,172
Missouri	191,015	332,219	416,783	362,130	353,992	340,195
Nebraska	96,608	155,359	207,550	207,371	152,942	161,118
North Dakota	d	15,069	18,645	24,757	26,743	25,184
South Dakota	20,674[e]	26,935	36,309	32,502	35,391	25,326
South Atlantic	**401,426**	**909,869**	**1,465,035**	**1,268,171**	**1,226,013**	**1,365,035**
Delaware	f	17,969	26,421	18,603	20,623	24,977
District of Columbia	f	f	f	f	f	f
Florida	26,366	182,093	332,223	271,471	311,893	332,664
Georgia	133,044	206,560	325,650	322,383	274,832	308,177
Maryland	58,301[g]	113,943[h]	179,784[h]	163,462[h]	158,945[h]	196,774[h]
North Carolina	10,620	71,473	145,076	111,276	79,390	125,867
South Carolina	21,977	84,564	156,559	120,308	113,690	116,421
Virginia	36,640	88,907	128,492	118,083	131,270	129,779
West Virginia	114,478	144,360	170,830	142,585	135,370	130,376
East South Central	**457,380**	**727,845**	**1,009,983**	**809,664**	**747,478**	**849,942**
Alabama	144,957	216,998	278,414	245,287	223,048	248,944
Kentucky	93,790	142,438	209,991	182,781	188,669	191,668
Mississippi	108,264	189,603	293,154	183,807	166,644	203,655
Tennessee	110,369	178,806	228,424	197,789	169,117	205,675
West South Central	**2,377,047**	**3,848,796**	**5,545,215**	**5,332,025**	**5,862,752**	**5,723,426**
Arkansas	171,600	255,637	359,338	241,803	205,680	230,807
Louisiana	601,651	857,118	1,482,275	1,425,686	1,609,552	1,615,568
Oklahoma	181,308	389,314	475,974	565,387	669,121	671,025
Texas	1,422,488	2,346,727	3,227,628	3,099,149	3,378,401	3,206,026
Mountain	**440,802**	**757,368**	**1,020,744**	**982,840**	**906,796**	**910,084**
Arizona	82,897[i]	136,297	168,994	139,130	159,866	152,366
Colorado	129,442	219,602	277,739	294,760	252,360	263,629
Idaho	0	32,831	42,367	56,182	39,770	49,759
Montana	43,871	64,320	81,992	75,441	68,305	62,706
Nevada	j	27,679	52,558	61,251	64,506	84,433
New Mexico	108,406	130,072	191,818	172,638	152,844	131,248
Utah	48,563	105,524	120,814	116,620	109,210	111,354
Wyoming	27,623	41,043	84,462	66,818	59,935	54,589
Pacific	**849,990**	**1,741,087**	**2,292,407**	**2,055,003**	**1,805,692**	**2,106,202**
Alaska	0	5,917	41,672	66,815	128,943	144,203
California	849,990	1,572,367	2,017,393	1,727,729	1,478,849	1,726,714
Hawaii	0	0	0	0	0	0
Oregon	0	55,383	89,776	101,980	77,409	84,432
Washington	0	107,420	143,566	158,479	120,491	150,853

a. Includes deliveries made directly to end users in addition to gas utility sales as shown in Table 66.
b. Includes New Hampshire and Vermont. e. Includes North Dakota. h. Includes District of Columbia.
c. Included in Maine. f. Included in Maryland. i. Includes Nevada.
d. Included in South Dakota. g. Includes Delaware and District of Columbia. j. Included in Arizona.
Source: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual*.

SUPPLY

TABLE 19

ANNUAL PRODUCTION OF FOSSIL ENERGY RESOURCES AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER IN THE UNITED STATES, 1955-1980

(Trillions of Btu)[a]

Year	Natural Gas Wet (unprocessed)	Crude Petroleum	Bituminous Coal and Lignite	Anthracite Coal	Hydropower[b]	Nuclear[c]	Grand Total Energy[e]
1955	10,204	14,410	12,174	665	1,447	–	38,900
1960	13,822	14,935	10,886	478	1,578	5	41,704
1965	17,628	16,521	13,417	378	2,033	38	50,015
1966	18,984	16,925	13,507	329	2,062	57	51,864
1967	20,087	18,100	13,904	311	2,347	80	54,829
1968	21,548	18,593	13,664	291	2,349	130	56,575
1969	22,838	18,886	13,957	266	2,648	146	58,741
1970	24,154	19,772	14,820	247	2,630	229	61,852
1971	24,805	20,033	13,385	222	2,825	404	61,674
1972	24,792	20,041	14,319	181	2,866	576	62,775
1973	24,764	19,493	14,208	174	2,680	888	62,387
1974	23,689	18,575	14,319	168	3,177	1,211	61,139
1975	22,022	17,729	15,044	158	3,155	1,839	59,947
1976R	21,831	17,262	15,610	158	2,976	2,037	60,091
1977R	21,892	17,454	15,829	d	2,333	2,702	60,293
1978R	21,730	18,434	15,037	d	2,958	2,977	61,204
1979R	22,362	18,104	17,651	d	2,954	2,748	63,907
1980	22,017	18,250	18,877	d	2,913	2,704	64,876

a. The unit heat values employed are: Anthracite, 12,700 Btu per pound; bituminous coal and lignite, 12,005 Btu per pound; petroleum approx. 5,800,000 Btu per barrel, obtained by using 5,248,000 for gasoline, 5,670,000 for kerosene, 5,825,000 for distillate, 6,287,000 for residual, 6,065,000 for lubricants, 5,537,000 for wax, 6,636,000 for asphalt and 5,796,000 miscellaneous; natural gas dry 1,021 Btu per cubic foot; natural gas liquids obtained by using 110,000 Btu per gallon for natural gasoline; 95,500 Btu per gallon for LP gas and ethane at 73,390 Btu per gallon.

b. Hydropower output is converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants obtained from the Federal Power Commission.

c. Nuclear power energy input conversion is based on information from the Atomic Power Commission.

d. Included in "Bituminous Coal and Lignite."

e. Includes geothermal power and electricity produced from wood and waste.

Source: Prior to 1977 U.S. Bureau of Mines, for 1977 and beyond, data taken from *Monthly Energy Review*, U.S. Dept. of Energy.

R – Revised

TABLE 20

ANNUAL PRODUCTION OF FOSSIL ENERGY RESOURCES AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER IN THE UNITED STATES, 1955-1980

(Percentage)

Year	Natural Gas Wet (unprocessed)	Crude Petroleum	Bituminous Coal and Lignite	Anthracite Coal	Hydropower	Nuclear	Grand Total Energy[c]
1955	26.2	37.1	31.3	1.7	3.7	–	100.0
1960	33.2	35.8	26.1	1.1	3.8	a	100.0
1965	35.2	33.0	26.8	0.8	4.1	0.1	100.0
1966	36.6	32.6	26.1	0.6	4.0	0.1	100.0
1967	36.6	33.0	25.4	0.6	4.3	0.1	100.0
1968	38.1	32.8	24.2	0.5	4.2	0.2	100.0
1969	38.9	32.2	23.8	0.4	4.5	0.2	100.0
1970	39.0	32.0	24.0	0.4	4.2	0.4	100.0
1971	40.7	32.5	21.7	0.4	4.6	0.6	100.0
1972	39.9	31.9	22.8	0.3	4.6	0.9	100.0
1973	39.7	31.2	22.8	0.3	4.6	1.4	100.0
1974	38.7	30.4	23.4	0.3	5.2	2.0	100.0
1975	36.7	29.6	25.1	0.3	5.3	3.0	100.0
1976R	36.5	28.8	26.1	0.3	4.95	3.3	100.0
1977R	36.4	29.0	26.3	b	3.87	4.5	100.0
1978R	35.5	30.12	24.6	b	4.83	4.9	100.0
1979R	35.0	28.33	27.62	b	4.62	4.3	100.0
1980	33.94	28.13	29.10	b	4.49	4.17	100.0

a. Less than 0.05.

b. Included in "Bituminous Coal and Lignite."

c. Includes geothermal power and electricity produced from wood and waste.

Source: Same as Table 19.

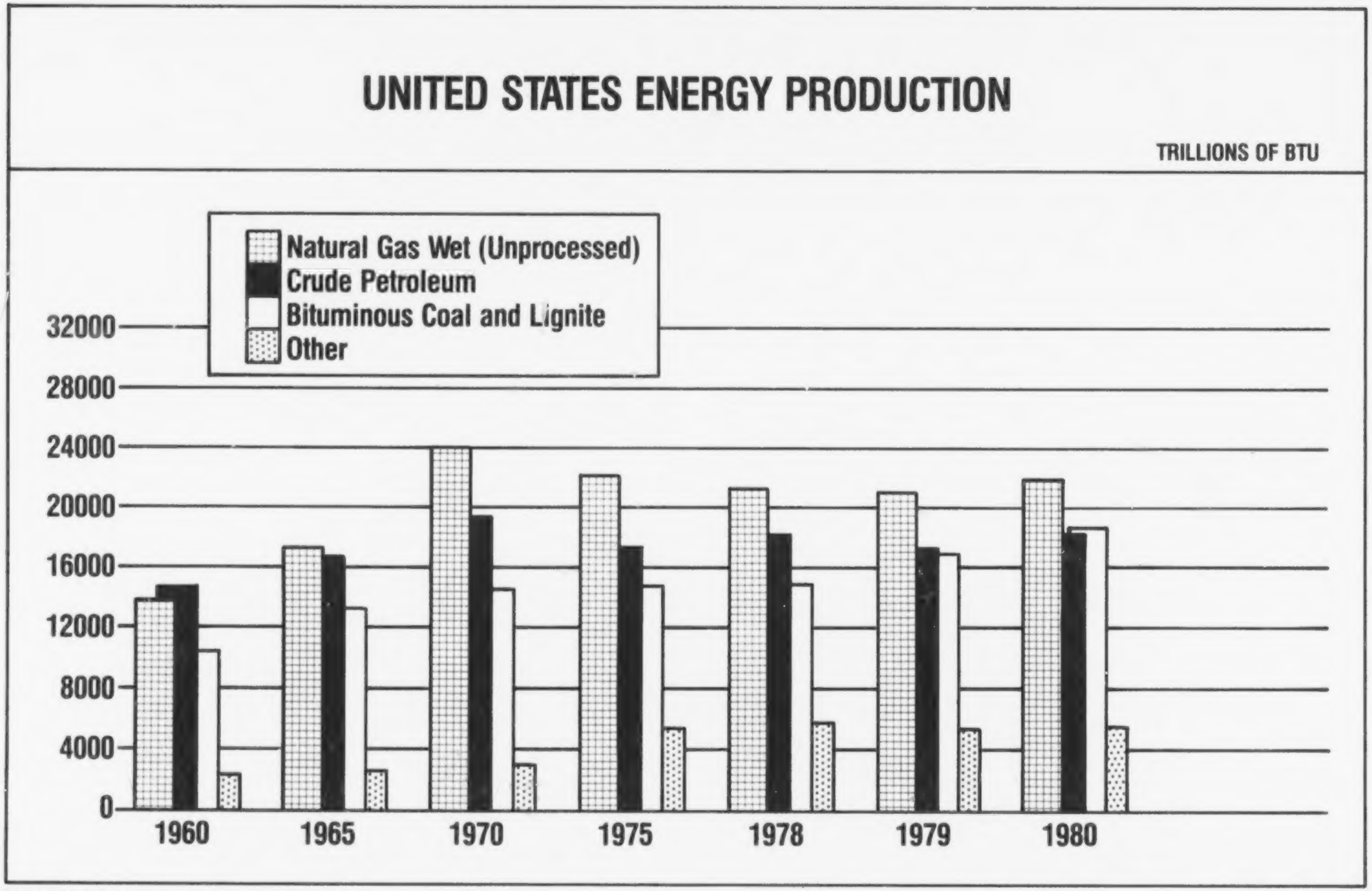
TABLE 14
SUPPLY AND DISPOSITION OF GAS IN THE UNITED STATES, 1955-1979

(Millions of cubic feet)

	Gross Production[a]						Disposition of Marketed Production								
Year	Gas Wells	Oil Wells	Total	Repressuring	Vented and Flared	Marketed Production[b]	Extraction Loss	Lease and Plant Fuel	Net Change in Underground Storage	Pipeline Fuel	Unaccounted For	Domestic Dry Production For Sale	Net Imports	Delivered to Consumers[c]
1955	7,841,958	3,877,836	11,719,794	1,540,804	773,639	9,405,351	1,507,671		67,934	245,246	246,933	7,337,567	(20,141)	7,317,426
1956	8,306,550	4,066,355	12,372,905	1,426,648	864,334	10,081,923	1,420,550		136,470	295,972	212,992	8,015,939	(25,583)	7,990,356
1957	8,716,835	4,189,834	12,906,669	1,417,263	809,148	10,680,258	1,479,720		191,396	299,235	205,373	8,504,534	(3,714)	8,500.820
1958	9,154,051	3,992,584	13,146,635	1,482,975	633,412	11,030,248	1,604,104		83,081	312,221	283,597	8,747,245	97,078	8,844,323
1959	10,101,754	4,127,518	14,229,272	1,612,109	571,048	12,046,115	1,737,402		118,742	349,348	223,312	9,617,311	115,577	9,732,888
1960	10,853,426	4,234,485	15,087,911	1,753,996	562,877	12,771,038	1,779,671		131,694	347,075	274,231	10,238,367	144,314	10,382,681
1961	11,195,087	4,265,225	15,460,312	1,682.754	523,533	13,254,025	1,881,208		145,616	377,607	234,808	10,614,786	208,113	10,822,899
1962	11,702,382	4,336,591	16,038,973	1,736,722	425,629	13,876,622	1,993,128		86,487	382,496	285,726	11,128,785	385,720	11,514,505
1963	12,606,022	4,367,346	16,973,368	1,843,297	383,408	14,746,663	2,081,339		130,772	423,783	364,658	11,746,111	389,247	12,135,358
1964	13,035,200	4,405,100	17,440,300	1,638,161	339,996	15,462,143	2,082,029		128,804	433,204	302,781	12,515,325	421,421	12,936,746
1965	13,523,600	4,439,500	17,963,100	1,604,204	319,143	16,039,753	1,909,697		118,115	500,524	318,711	13,192,706	430,262	13,622,968
1966	13,893,921	5,139,918	19,033,839	1,451,516	375,695	17,206,628	1,772,708		68,855	535,353	401,203	14,428,509	455,141	14,883,650
1967	15,346,853	4,904,923	20,251,776	1,590,574	489,877	18,171,325	784,534	1,140,966	184,829	575,752	296,214	15,189,030	482,612	15,671,642
1968	16,539,925	4,785,075	21,325,000	1,486,092	516,508	19,322,400	827,877	1,237,131	95,539	590,965	325,062	16,245,826	558,140	16,803,966
1969	17,489,415	5,189,780	22,679,195	1,455,205	525,750	20,698,240	866,560	1,345,648	119,500	630,962	331,587	17,403,983	675,647	18,079,630
1970	18,594,658	5,191,795	23,786,453	1,376,351	489,460	21,920,642	906,413	1,398,758	398,160	722,166	227,650	18,267,495	750,967	19,018,462
1971	18,925,136	5,162,895	24,088,031	1,310,458	284,561	22,493,012	883,127	1,413,650	331,768	742,592	338,999	18,782,876	854,336	19,637,212
1972	19,042,592	4,973,517	24,016,109	1,236,292	248,119	22,531,698	907,993	1,455,563	135,734	766,156	328,002	18,938,250	941,483	19,879,733
1973	19,371,600	4,695,602	24,067,202	1,171,361	248,292	22,647,549	916,551	1,495,915	441,504	728,177	195,863	18,869,539	955,732	19,825,271
1974	18,669,212	4,180,581	22,849,793	1,079,890	169,381	21,600,522	887,490	1,477,386	83,663	668,792	288,731	18,194,460	882,495	19,076,955
1975	17,380,293	3,723,237	21,103,530	860,956	133,913	20,108,661	872,282	1,396,277	344,054	582,963	235,068	16,678,020	880,333	17,558,353
1976	17,190,655	3,753,123	20,943,778	859,410	131,930	19,952,438	854,086	1,634,355	(165,327)	548,323	216,240	16,864,760	899,058	17,763,818
1977	17,415,983	3,681,088	21,097,071	934,801	136,807	20,025,463	862,563	1,659,145	556,631	532,669	41,063	16,373,392	955,375	17,328,767
1978	17,394,213	3,914,602	21,308,815	1,181,432	153,350	19,974,033	852,130	1,647,911	120,237	530,451	287,201	16,536,103	913,013	17,449,116
1979	18,033,879	3,849,474	21,883,353	1,245,074	167,019	20,471,260	807,845	1,498,530	248,034	600,964	372,330	16,943,557	1,197,710	18,141,267

a. Includes gas (mostly residue gas) blown to the air but does not include direct waste on producing properties, except where data are available.
b. "Marketed Production" equals "Total Gross Production" less "Repressuring" and "Vented and Flared". It includes an allowance for natural gas liquids content in the natural gas.
c. Defined as Domestic Dry Production For Sale plus Net Imports.
( ): Denotes negative.
Sources: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual.*
Note: 1980 data reported by U.S. Department of Energy, *Monthly Energy Review* is as follows: "Marketed Production – 20,145,000 million of cubic feet (MMcf); "Net Imports" – 994,000 MMcf; " Net Change in Underground Storage" – 368,000 MMcf.

CHART 6



UNITED STATES ENERGY PRODUCTION

REFERENCE: TABLE 19

TABLE 21
TOTAL OFFSHORE PRODUCTION OF NATURAL GAS AND PERCENT STATE/FEDERALLY CONTROLLED, BY STATE, 1955-1980

Year	Alaska			California			Louisiana			Texas			Total		
		Percent			Percent			Percent			Percent			Percent	
	MMcf	State	OCS	MMcf	State	OCS	MMcf	State	OCS	MMcf	State	OCS	MMcf	State	OCS
1955	–	–	–	–	100	–	121,279	33	67	6,880	100	–	128,159	37	63
1956	–	–	–	–	100	–	136,527	39	61	6,880	100	–	143,407	42	58
1957	–	–	–	–	100	–	160,472	49	51	13,765	100	–	174,237	53	47
1958	–	–	–	–	100	–	233,967	45	55	24,080	100	–	258,047	51	49
1959	–	–	–	–	100	–	329,280	37	63	24,080	100	–	353,360	41	59
1960	–	–	–	1,113	100	–	408,388	33	67	30,960	100	–	440,461	38	62
1961	–	–	–	5,903	100	–	458,481	31	69	13,760	100	–	478,144	33	67
1962	–	–	–	10,671	100	–	588,361	23	77	41,280	100	–	640,312	29	71
1963	–	–	–	25,769	100	–	706,545	20	80	30,960	100	–	763,274	26	74
1964	–	–	–	35,323	100	–	783,474	21	79	30,960	100	–	849,757	27	73
1965	10	100	–	40,770	100	–	871,124	26	74	27,520	100	–	939,424	31	69
1966	1,200	100	–	46,839	100	–	1,265,899	24	76	59,259	29	71	1,373,197	27	73
1967	8,324	100	–	46,732	100	–	1,655,223	34	66	127,473	22	78	1,837,752	35	65
1968	22,844	100	–	86,565	99	1	2,057,291	31	69	154,631	29	71	2,321,331	34	66
1969	44,393	100	–	81,326	94	6	2,478,745	26	74	240,212	47	53	2,844,676	31	69
1970	82,369	100	–	71,225	83	17	2,800,104	19	81	264,420	50	50	3,218,118	25	75
1971	83,750	100	–	60,484	74	26	3,219,200	18	82	387,245	67	33	3,750,679	26	74
1972	74,982	100	–	44,830	78	22	3,480,831	17	83	156,772	6	94	3,757,415	19	81
1973	72,526	100	–	37,581	81	19	3,614,892	15	85	250,338	41	59	3,975,337	17	83
1974	73,295	100	–	30,156	82	18	3,871,964	14	86	254,338	37	63	4,229,753	17	83
1975	75,581	100	–	27,272	86	14	3,821,746	13	87	332,862	63	37	4,257,461	19	81
1976	72,164	100	–	14,305	76	24	4,003,808	13	87	206,043	55	45	4,296,320	16	84
1977	75,735	100	–	14,961	78	22	4,094,784	11	89	354,531	75	25	4,540,011	18	82
1978	46,517	100	–	16,772	79	21	4,909,206	11	89	402,000	58	42	5,374,495	14	86
1979	49,319	100	–	15,969	82	18	4,636,462	10	90	719,208	29	71	5,420,958	14	86
1980	50,142	100	–	14,707	79	21	4,422,826	9	91	879,020	29	71	5,366,695	14	86

Source: U.S. Department of the Interior, Geological Survey, *Outer Continental Shelf Statistics*.

TABLE 22
EXPORTS OF NATURAL GAS FROM THE UNITED STATES, 1955-1980

(Millions of cubic feet)

Year	Total	Canada	Mexico	Japan*
1955	31,397	11,494	19,903	0
1960	16,100	5,574	10,526	0
1965	27,428	17,892	9,536	0
1966	54,860	44,958	9,902	0
1967	81,595	70,456	11,139	0
1968	93,745	81,647	12,098	0
1969	51,308	34,936	13,390	2,982
1970	69,813	10,860	14,678	44,275
1971	80,365	14,349	15,785	50,231
1972	78,014	15,553	14,579	47,882
1973	77,169	14,824	13,999	48,346
1974	76,789	13,263	13,268	50,258
1975	72,675	10,219	9,454	53,002
1976	64,710	7,506	7,425	49,779
1977	55,626	31	3,940	51,655
1978	52,533	66	4,033	48,434
1979	55,673	76	4,308	51,289
1980	48,731	113	3,886	44,732

*LNG exports from Alaska.
Source: Federal Energy Regulatory Commission.

TABLE 23
IMPORTS OF NATURAL GAS TO THE UNITED STATES, 1955-1980

(Millions of cubic feet)

Year	Total	Canada	Mexico	Algeria*
1955	10,892	10,885	7	0
1960	156,843	109,855	46,988	0
1965	456,694	404,687	52,007	0
1966	480,591	431,955	48,636	0
1967	564,228	513,256	50,972	0
1968	651,885	604,462	47,423	0
1969	726,952	680,107	46,845	0
1970	820,781	778,688	41,336	757
1971	934,547	910,925	20,689	2,933
1972	1,019,495	1,009,092	8,140	2,262
1973	1,032,903	1,027,216	1,632	4,055
1974	959,285	959,063	222	0
1975	953,007	948,114	0	4,893
1976	963,768	953,613	0	10,155
1977	1,010,431	996,723	2,384	11,324
1978	965,545	881,123	0	84,422
1979	1,253,383	1,000,775	0	252,608
1980	984,767	796,507	102,410	85,850

*Quantities represent total LNG imports into the U.S.
Source: Federal Energy Regulatory Commission.

SUPPLY

TABLE 25
NUMBER OF PRODUCING GAS WELLS, BY STATE, 1955-1980[a]

Division and State	1955	1960	1965	1970	1975	1979[R]	1980[p]
United States	**71,475**	**90,761**	**111,680**	**117,483**	**132,095**	**169,891**	**175,213**
New England	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**17,480**	**17,350**	**18,666**	**16,839**	**18,200**	**22,000**	**21,900**
New Jersey	0	0	0	0	0	0	0
New York	1,180	1,000	1,150	600	900	2,200	2,200
Pennsylvania	16,300	16,350	17,516	16,239	17,300	19,800	19,700
East North Central	**6,890**	**7,612**	**7,626**	**9,082**	**11,110**	**16,909**	**17,981**
Illinois	30	45	25	8	41	51	58
Indiana	400	350	275	50	478	655	655
Michigan	260	154	226	1,235	209	376	423
Ohio	6,200	7,063	7,100	7,789	10,382	15,827	16,845
Wisconsin	0	0	0	0	0	0	0
West North Central	**5,132**	**6,093**	**7,281**	**8,735**	**8,925**	**10,652**	**10,618**
Iowa	0	0	0	0	0	0	0
Kansas	5,100	6,003	7,200	8,660	8,865	10,544	10,544
Minnesota	0	0	0	0	0	0	0
Missouri	32[b]	9	11	11	3	0	0
Nebraska	b	53	39	35	19	20	22
North Dakota	c	28	31	29	18	78	52
South Dakota	c	0	0	0	20	10	0
South Atlantic	**14,000**	**14,630**	**19,719**	**20,833**	**21,901**	**24.995**	**25,874**
Delaware	0	0	0	0	0	0	0
District of Colmbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0
Maryland	c	38	20	16	15	12	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	c	92	99	115	186	258	274
West Virginia	14,000	14,500	19,600	20,702	22,700	24,725	25,600
East South Central	**4,358**	**5,263**	**6,490**	**7,255**	**7,684**	**8,750**	**8,912**
Alabama	c	4	0	2	45	250	262
Kentucky	4,100	4,829	6,100	6,913	7,386	7,883	7,992
Mississippi	230	400	370	325	248	433	458
Tennessee	28	30	20	15	5	184	200
West South Central	**19,440**	**31,261**	**40,502**	**42,283**	**48,440**	**65,933**	**65,738**
Arkansas	240	370	744	1,008	1,128	1,402	1,188
Louisiana	3,600	6,479	8,563	9,690	11,359	14,464	11,486
Oklahoma	4,200	5,800	7,447	8,168	9,769	14,417	15,245
Texas	11,400	18,612	23,748	23,417	26,184	35,650	37,819
Mountain	**3,580**	**7,898**	**10,352**	**11,425**	**14,189**	**19,472**	**20,347**
Arizona	0	1	8	4	1	1	0
Colorado	100	466	701	861	1,380	2,574	2,650
Idaho	0	0	0	0	0	0	0
Montana	1,060	999	784	739	1,235	1,881	2,150
Nevada	0	0	0	0	0	0	0
New Mexico	2,200	6,047	8,010	8,848	10,352	13,598	13,843
Utah	c	35	148	173	271	182	200
Wyoming	220	350	701	800	950	1,236	1,504
Pacific	**470**	**654**	**1,044**	**1,031**	**1,646**	**1,180**	**959**
Alaska	0	2	11	51	61	58	54
California	470	652	1,033	980	1,585	1,117	905
Hawaii	0	0	0	0	0	0	0
Oregon	0	0	0	0	0	5	0
Washington	0	0	0	0	0	0	0
Other States	**125**	**0**	**0**	**0**	**0**	0	**31**
Federal Waters	**d**	**d**	**d**	**d**	**d**	d	**2,853**

a. Data pertain only to dry gas and condensate wells. Data as of December 31.
b. Nebraska included in Missouri.
c. Either none or included in "Other States."
d. "Federal Waters" is included in Texas, Louisiana, and California totals.
p – Preliminary.
R – Revised.
Source: Same as Table 14. Preliminary numbers taken from *World Oil*, February 1981.

TABLE 26
NEW GAS WELL COMPLETIONS, BY STATE, 1955-1980[a]

Division and State	1955	1960	1965	1970	1975	1979	1980
United States	**3,613**	**3,952**	**4,724**	**3,840**	**7,580**	**14,681**	**15,730**
New England	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**293**	**297**	**304**	**267**	**876**	**1,346**	**1,459**
New Jersey	0	0	0	0	0	0	0
New York	2	28	18	17	236	302	360
Pennsylvania	291	269	286	250	640	1,044	1,099
East North Central	**307**	**306**	**317**	**711**	**610**	**2,088**	**2,021**
Illinois	16	8	8	5	5	16	8
Indiana	22	12	10	4	17	28	46
Michigan	19	26	36	19	33	60	54
Ohio	250	260	263	683	555	1,984	1,913
Wisconsin	0	0	0	0	0	0	0
West North Central	**366**	**202**	**207**	**111**	**440**	**804**	**607**
Iowa	0	0	0	0	0	0	0
Kansas	362	200	206	108	438	748	573
Minnesota	0	0	0	0	0	0	0
Missouri	4[b]	0	0	0	1	4	1
Nebraska	b	2	1	2	1	25	14
North Dakota	0	0	0	1	0	19	15
South Dakota	0	0	0	0	0	8	4
South Atlantic	**443**	**694**	**697**	**553**	**582**	**1,211**	**1,420**
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0
Maryland	0	0	1	0	0	0	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	0	8	1	0	26	18	9
West Virginia	443	686	695	553	556	1,193	1,411
East South Central	**164**	**275**	**195**	**132**	**218**	**406**	**413**
Alabama	0	0	0	5	26	80	61
Kentucky	162	264	177	111	123	141	126
Mississippi	1	9	15	12	31	51	58
Tennessee	1	2	3	4	38	134	168
West South Central	**1,254**	**1,484**	**2,478**	**1,670**	**3,611**	**6,979**	**7,647**
Arkansas	10	36	44	36	23	82	121
Louisiana	282	282	542	539	815	1,520	1,779
Oklahoma	359	434	549	321	638	1,768	2,063
Texas	603	732	1,343	774	2,135	3,609	3,684
Mountain	**722**	**577**	**451**	**335**	**1,193**	**1,793**	**2,081**
Arizona	1	1	0	0	0	0	0
Colorado	84	116	53	47	300	399	481
Idaho	1	0	0	0	0	0	0
Montana	16	8	10	74	279	247	252
Nevada	0	0	0	0	0	0	0
New Mexico	564	374	303	159	517	820	996
Utah	10	23	27	10	19	103	98
Wyoming	46	55	58	45	78	224	254
Pacific	**64**	**117**	**75**	**61**	**50**	**54**	**82**
Alaska	0	3	13	5	4	4	3
California	64	114	62	56	46	45	77
Hawaii	0	0	0	0	0	0	0
Oregon	0	0	0	0	0	5	2
Washington	0	0	0	0	0	0	0
Federal Waters	**0**	**0**	**0**	**0**	**0**	**0**	**0**

a. Includes condensate wells for all years except 1960.
b. Nebraska included in Missouri.
Source: American Petroleum Institute, *Quarterly Review of Drilling Statistics*.

TABLE 27
NEW-FIELD WILDCAT WELLS DRILLED AND PROPORTION SUCCESSFUL, 1955–1980

Year	Total Drilled	Dry	Productive	Percent Productive
1955	8,104	7,186	918	11.3
1956	8,709	7,841	868	10.0
1957	8,014	7,142	872	10.9
1958	6,950	6,164	786	11.3
1959	7,031	6,259	772	11.0
1960	7,320	6,575	745	10.2
1961	6,909	6,164	745	10.8
1962	6,794	6,007	787	11.6
1963	6,570	5,801	769	11.7
1964	6,632	5,931	701	10.6
1965	6,182	5,544	638	10.3
1966	6,158	5,523	635	10.3
1967	5,271	4,727	544	10.3
1968	5,205	4,763	442	8.5
1969	5,956	5,421	535	9.0
1970	5,069	4,576	493	9.7
1971	4,463	4,027	436	9.7
1972	5,086	4,520	566	11.1
1973	4,989	4,288	701	14.1
1974	5,652	4,847	805	14.2
1975	6,104	5,228	876	14.4
1976	5,840	4,854	986	16.9
1977	6,101	5,097	1,004	16.5
1978	6,505	5,522	983	15.1
1979	6,413	5,251	1,162	18.1
1980	7,034	5,694	1,340	19.0

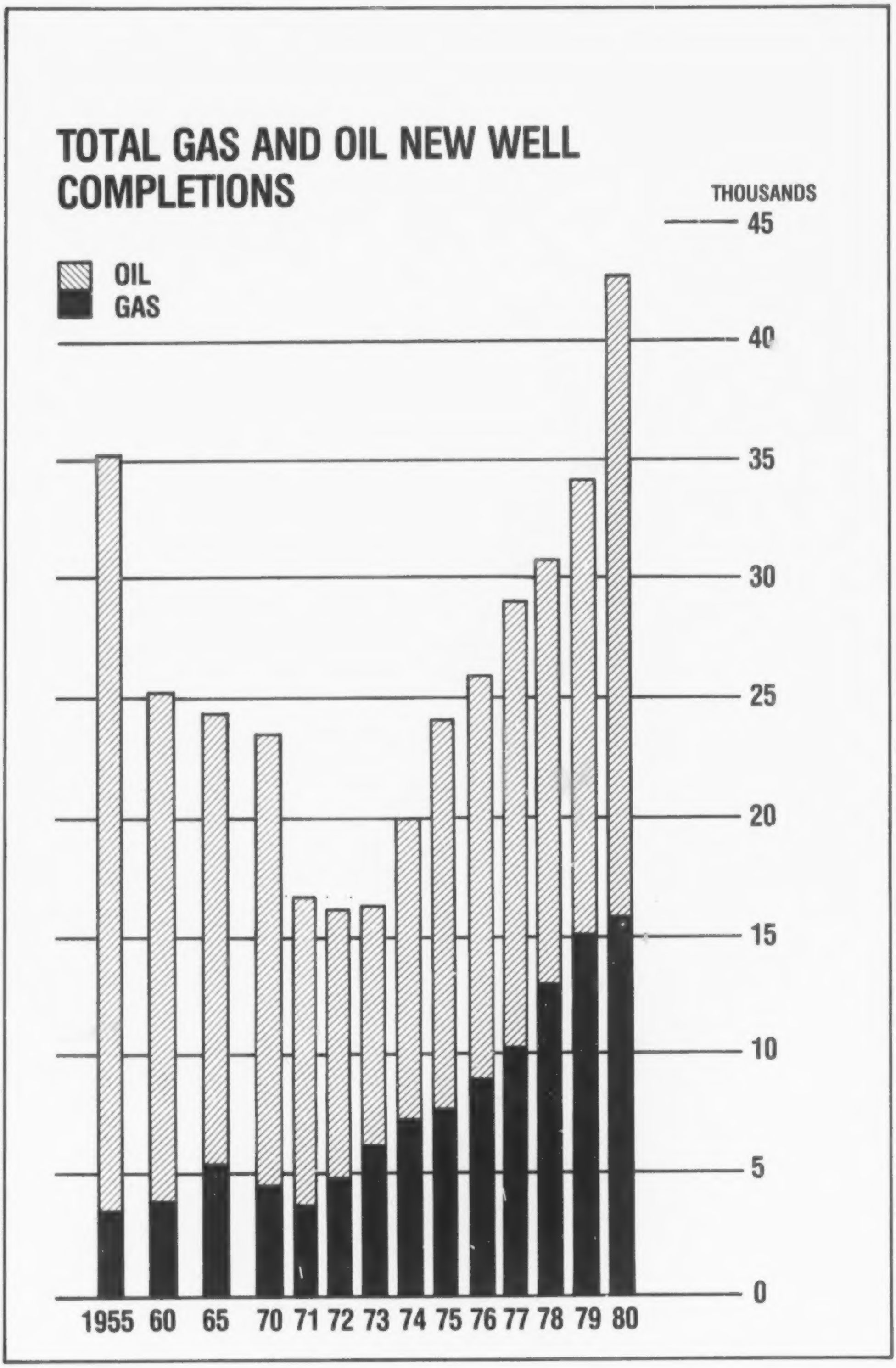
Source: American Petroleum Institute. *Quarterly Review of Drilling Statistics.*

TABLE 28
NEW WELL COMPLETIONS, BY TYPE OF WELL, 1955–1980

Year	Total[a]	Oil	Condensate	Gas	Service[a]	Dry
1955	56,682	31,567	b	3,613	760	20,742
1956	58,160	30,730	428	4,115	1,049	21,838
1957	55,024	28,012	688	3,932	1,409	20,983
1958	50,039	24,578	1,125	3,678	1,615	19,043
1959	51,764	25,800	1,255	3,774	1,670	19,265
1960	46,751	21,186	1,306	3,952	2,733	17,574
1961	46,962	21,101	749	4,915	3,091	17,106
1962	46,179	21,249	123	5,725	2,400	16,682
1963	43,653	20,288	b	4,751	2,267	16,347
1964	45,236	20,620	b	4,855	2,273	17,488
1965	41,432	18,761	b	4,724	1,922	16,025
1966	37,881	16,447	b	4,167	1,497	15,770
1967	33,630	15,329	b	3,659	1,396	13,[illegible]46
1968	32,038	14,331	b	3,456	1,439	12,8[illegible]
1969	33,677	14,368	b	4,083	1,490	13,736
1970	29,341	13,020	b	3,840	1,221	11,260
1971	27,250	11,858	b	3,830	1,399	10,163
1972	28,725	11,306	b	4,928	1,434	11,057
1973	27,551	9,902	b	6,385	959	10,305
1974	32,756	12,784	b	7,240	1,058	11,674
1975	38,732	16,408	b	7,580	1,497	13,247
1976	41,305	17,059	b	9,085	1,540	13,621
1977	46,328	18,912	b	11,378	1,346	14,692
1978	48,434	17,775	b	13,064	1,377	16,218
1979R	51,203	19,383	b	14,681	1,387	15,752
1980	62,427	27,026	b	15,730	1,582	18,089

a. Excludes stratigraphic and core tests.
b. Included with oil prior to 1956 and with gas after 1962.
Source: *Oil and Gas Journal* prior to 1968. American Petroleum Institute. *Quarterly Review of Drilling Statistics.*

CHART 7



REFERENCE: TABLE 28

TABLE 29
NEW WELL COMPLETIONS, BY TYPE OF WELL AND STATE, 1980

Division and State	Total*	Oil	Gas	Service*	Dry
United States	**62,427**	**27,026**	**15,730**	**1,582**	**18,089**
New England	**0**	**0**	**0**	**0**	**0**
Connecticut	0	0	0	0	0
Maine	0	0	0	0	0
Massachusetts	0	0	0	0	0
New Hampshire	0	0	0	0	0
Rhode Island	0	0	0	0	0
Vermont	0	0	0	0	0
Middle Atlantic	**2,513**	**908**	**1,459**	**79**	**67**
New Jersey	0	0	0	0	0
New York	494	106	360	16	12
Pennsylvania	2,019	802	1,099	63	55
East North Central	**6,824**	**2,910**	**2,021**	**183**	**1,710**
Illinois	2,127	1,085	8	148	886
Indiana	746	328	46	18	354
Michigan	682	209	54	17	402
Ohio	3,269	1,288	1,913	0	68
Wisconsin	0	0	0	0	0
West North Central	**6,355**	**2,709**	**607**	**94**	**2,945**
Iowa	0	0	0	0	0
Kansas	5,159	2,170	573	81	2,335
Minnesota	0	0	0	0	0
Missouri	31	1	1	8	21
Nebraska	538	172	14	3	349
North Dakota	586	355	15	1	215
South Dakota	41	11	4	1	25
South Atlantic	**1,738**	**139**	**1,420**	**36**	**143**
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	12	5	0	1	6
Georgia	0	0	0	0	0
Maryland	0	0	0	0	0
North Carolina	0	0	0	0	0
South Carolina	0	0	0	0	0
Virginia	14	2	9	0	3
West Virginia	1,712	132	1,411	35	134
East South Central	**2,452**	**752**	**413**	**44**	**1,243**
Alabama	189	20	61	0	108
Kentucky	1,292	449	126	32	685
Mississippi	631	171	58	12	390
Tennessee	340	112	168	0	60
West South Central	**33,884**	**15,871**	**7,647**	**677**	**9,689**
Arkansas	612	207	121	5	279
Louisiana	4,956	1,304	1,779	94	1,779
Oklahoma	9,073	4,692	2,063	32	2,286
Texas	19,243	9,668	3,684	546	5,345
Mountain	**5,809**	**1,789**	**2,081**	**58**	**1,881**
Arizona	4	0	0	0	4
Colorado	1,253	265	481	1	506
Idaho	6	0	0	0	6
Montana	881	188	252	6	435
Nevada	13	1	0	0	12
New Mexico	1,966	671	996	31	268
Utah	280	66	98	3	113
Wyoming	1,406	598	254	17	537
Pacific	**2,811**	**1,934**	**82**	**411**	**384**
Alaska	134	112	3	4	15
California	2,646	1,822	77	407	340
Hawaii	0	0	0	0	0
Oregon	31	0	2	0	29
Washington	0	0	0	0	0
Offshore Federal Waters	**41**	**14**	**0**	**0**	**27**

* Excludes stratigraphic and core tests, which totalled 35 in 1980.
Source: American Petroleum Institute, *Quarterly Review of Drilling Statistics.*

TABLE 30
HOLES DRILLED AND PROPORTION SUCCESSFUL, BY TYPE OF EXPLORATORY HOLE, 1955-1980

	Outposts-Extensions	New-Pool Wildcats	Deeper-Pool Tests	Shallower-Pool Tests	New-Field Wildcats	Total
1955						
Drilled	3,204	2,931	465	233	8,104	14,937
Dry	2,086	2,219	279	62	7,186	11,832
Productive	[illegible]18	712	186	171	918	3,105
Percent Productive	[illegible]4.9	24.3	40.0	73.4	11.3	20.8
1960						
Drilled	2,431	1,342	495	116	7,320	11,704
Dry	1,603	1,000	309	28	6,575	9,515
Productive	828	342	186	88	745	2,189
Percent Productive	34.1	25.5	37.6	75.9	10.2	18.7
1965						
Drilled	1,131	1,707	353	93	6,182	9,466
Dry	805	1,374	242	40	5,544	8,005
Productive	326	333	111	53	638	1,461
Percent Productive	28.8	19.5	31.4	57.0	10.3	15.4
1970						
Drilled	1,228	1,043	260	93	5,069	7,693
Dry	832	808	167	39	4,576	6,422
Productive	396	235	93	54	493	1,271
Percent Productive	32.2	22.5	35.8	58.1	9.7	16.5
1972						
Drilled	1,042	1,053	245	113	5,086	7,539
Dry	693	828	159	54	4,520	6,254
Productive	349	225	86	59	566	1,285
Percent Productive	33.5	21.4	35.1	52.2	11.1	17.0
1973						
Drilled	1,164	972	255	86	4,989	7,466
Dry	774	683	170	32	4,288	5,947
Productive	390	289	85	54	701	1,519
Percent Productive	33.5	29.7	33.3	62.8	14.1	20.4
1974						
Drilled	1,498	1,047	321	101	5,652	8,619
Dry	829	748	153	33	4,847	6,610
Productive	669	299	168	68	805	2,009
Percent Productive	44.7	28.6	52.3	67.3	14.2	23.3
1975						
Drilled	1,577	1,112	288	133	6,104	9,214
Dry	905	719	181	38	5,228	7,071
Productive	672	393	107	95	876	2,143
Percent Productive	42.6	35.3	37.2	71.4	14.4	23.3
1976						
Drilled	1,718	1,249	264	163	5,840	9.234
Dry	942	790	159	40	4,854	6,785
Productive	776	459	105	123	986	2,449
Percent Productive	45.2	36.7	39.8	75.5	16.9	26.5
1977						
Drilled	1,914	1,376	366	204	6,101	9,961
Dry	1,040	870	236	32	5,097	7,275
Productive	874	506	130	172	1,004	2,686
Percent Productive	45.7	36.8	35.5	84.3	16.5	27.0
1978						
Drilled	2,024	1,549	380	219	6,505	10,677
Dry	1,180	958	247	42	5,522	7,949
Productive	844	591	133	177	983	2,728
Percent Productive	41.7	38.2	35.0	80.8	15.1	25.6
1979						
Drilled	1,853	1,486	486	246	6,374	10,445
Dry	1,003	841	304	61	5,212	7,421
Productive	850	645	182	185	1,162	3,024
Percent Productive	45.9	43.4	37.5	75.2	18.2	29.0
1980						
Drilled	1,981	1,819	789	293	7,034	11,916
Dry	1,104	952	523	69	5,694	8,342
Productive	877	867	266	224	1,340	3,574
Percent Productive	44.3	47.7	33.7	76.4	19.1	30.0

Source: Committee on Statistics of Drilling. *American Association of Petroleum Geologists Bulletin.*

TABLE 31
WELLS AND DRY HOLES DRILLED AS EXPLORATORY TESTS, BY STATE AND TYPE OF WELL, 1980

Division and State	Total Drilled	Dry Holes	Producers		
			Total	Oil	Gas
United States	**11,916**	**8,342**	**3,574**	**1,605**	**1,969**
New England	**0**	**0**	**0**	**0**	**0**
Connecticut	0	0	0	0	0
Maine	0	0	0	0	0
Massachusetts	0	0	0	0	0
New Hampshire	0	0	0	0	0
Rhode Island	0	0	0	0	0
Vermont	0	0	0	0	0
Middle Atlantic	**151**	**23**	**128**	**11**	**117**
New Jersey	0	0	0	0	0
New York	20	4	16	0	16
Pennsylvania	131	19	112	11	101
East North Central	**1,149**	**855**	**294**	**220**	**74**
Illinois	444	361	83	83	0
Indiana	324	233	91	85	6
Michigan	321	257	64	42	22
Ohio	60	4	56	10	46
Wisconsin	0	0	0	0	0
West North Central	**1,664**	**1,329**	**335**	**258**	**77**
Iowa	0	0	0	0	0
Kansas	1,097	878	219	156	63
Minnesota	0	0	0	0	0
Missouri	15	15	0	0	0
Nebraska	293	256	37	26	11
North Dakota	242	164	78	75	3
South Dakota	17	16	1	1	0
South Atlantic	**118**	**28**	**90**	**10**	**80**
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	5	5	0	0	0
Georgia	0	0	0	0	0
Maryland	0	0	0	0	0
North Carolina	0	0	0	0	0
South Carolina	0	0	0	0	0
Virginia	1	1	0	0	0
West Virginia	112	22	90	10	80
East South Central	**995**	**718**	**277**	**132**	**145**
Alabama	80	69	11	2	9
Kentucky	447	355	92	55	37
Mississippi	280	242	38	25	13
Tennessee	188	52	136	50	86
West South Central	**5,691**	**3,860**	**1,831**	**684**	**1,147**
Arkansas	111	98	13	8	5
Louisiana	798	709	89	32	57
Oklahoma	508	302	206	92	114
Texas	4,274	2,751	1,523	552	971
Mountain	**1,678**	**1,195**	**483**	**200**	**283**
Arizona	4	4	0	0	0
Colorado	487	353	134	54	80
Idaho	6	6	0	0	0
Montana	374	289	85	46	39
Nevada	12	12	0	0	0
New Mexico	292	150	142	44	98
Utah	91	70	21	7	14
Wyoming	412	311	101	49	52
Pacific	**446**	**310**	**136**	**90**	**46**
Alaska	14	14	0	0	0
California	410	275	135	90	45
Hawaii	0	0	0	0	0
Oregon	22	21	1	0	1
Washington	0	0	0	0	0
Offshore Federal Waters	**24**	**24**	**0**	**0**	**0**

Source: American Petroleum Institute. *Quarterly Review of Drilling Statistics.*

TABLE 32
DRILLING OPERATIONS AND EXPENDITURES, BY TYPE OF WELL, 1978-1979[a]

	Total	Oil	Gas[b]	Dry
		1978		
Wells drilled	46,655	17,790	13,306	15,559
Footage drilled (000)	230,619	74,411	72,819	83,389
Expenditures (000)	$13,061,090	$3,700,025	$4,978,822	$4,382,243
Average depth per well (ft)	4,943	4,183	5,473	5,360
Average cost per well	$ 279,950	$ 207,983	$ 374,179	$ 281,653
Average cost per foot	$ 56.63	$ 49.72	$ 68.37	$ 52.55
		1979		
Wells drilled	48,523	19,243	14,079	15,201
Footage drilled (000)	237,512	80,261	77,340	79,911
Expenditures (000)	$16,078,930	$4,678,560	$6,238,126	$5,162,244
Average depth per well (ft)	4,894	4,170	5,493	5,256
Average cost per well	$ 331,367	$ 243,130	$ 443,080	$ 339,598
Average cost per foot	$ 67.70	$ 58.29	$ 80.66	$ 64.60

a. Includes all charges for drilling and equipping wells up to and including the "Christmas" trees, but excludes exploration, development and production costs and expenditures for service wells.
b. Includes condensate wells.
Source: American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil & Gas Association, *Joint Association Survey of Industry Drilling Costs.*

TABLE 33
OFF SHORE DRILLING OPERATIONS AND EXPENDITURES, BY TYPE OF WELL, 1978-1979[a]

	Total	Oil	Gas[b]	Dry
		1978		
Wells drilled	1,197	298	419	480
Footage drilled (000)	11,757	2,815	4,209	4,733
Expenditures (000)	$2,577,283	$ 542,971	$ 982,577	$1,051,734
Average depth per well (ft)	9,822	9,446	10,045	9,860
Average cost per well	$2,153,119	$1,822,050	$2,345,053	$2,191,113
Average cost per foot	$ 219.21	$ 192.88	$ 233.45	$ 222.21
		1979		
Wells drilled	1,260	349	453	458
Footage drilled (000)	12,392	3,240	4,606	4,545
Expenditures (000)	$3,207,031	$ 694,803	$1,227,705	$1,284,522
Average depth per well (ft)	9,835	9,283	10,169	9,925
Average cost per well	$2,545,263	$1,990,841	$2,710,167	$2,804,634
Average cost per foot	$ 258.78	$ 214.44	$ 266.50	$ 282.57

a. Includes all charges for drilling and equipping wells up to and including the "Christmas" trees, but excludes exploration, development and production costs and expenditures for service wells.
b. Includes condensate wells.
Source: American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil & Gas Association, *Joint Association Survey of the U.S. Oil and Gas Producing Industry.*

TABLE 34
AVERAGE COST PER FOOT BY TYPE OF WELL, BY DEPTH CLASSES, 1975-1979*

Depth Range (in feet)	Total	Oil	Gas	Dry
		1975		
0- 1,249	$ 22.00	$ 23.60	$ 25.70	$ 16.08
1,250- 2,499	19.85	21.62	23.19	14.98
2,500- 3,749	21.06	24.04	23.80	14.83
3,750- 4,999	20.99	26.12	23.20	14.98
5,000- 7,499	27.69	31.51	30.15	22.32
7,500- 9,999	38.91	38.03	42.95	37.01
10,000-12,499	55.93	58.18	63.98	49.59
12,500-14,999	74.48	73.71	82.22	68.25
15,000-17,499	100.38	110.35	114.14	87.48
17,500-19,999	126.50	144.87	128.65	121.16
20,000 and over	143.81	161.67	132.39	154.70
		1976		
0- 1,249	$ 22.84	$ 24.84	$ 28.80	$ 15.52
1,250- 2,499	21.26	23.58	22.65	16.07
2,500- 3,749	22.90	26.09	26.25	16.02
3,750- 4,999	22.04	26.74	23.83	16.14
5,000- 7,499	29.40	32.79	32.65	23.36
7,500- 9,999	42.89	43.08	46.46	40.29
10,000-12,499	64.29	68.56	70.01	57.47
12,500-14,999	86.00	92.47	90.91	79.23
15,000-17,499	108.36	126.25	116.91	96.68
17,500-19,999	129.90	136.54	134.79	122.48
20,000 and over	183.61	163.43	188.01	178.77
		1977		
0- 1,249	$ 26.14	$ 26.79	$ 28.23	$ 23.35
1,250- 2,499	23.66	26.00	25.11	18.07
2,500- 3,749	24.69	26.94	29.81	17.00
3,750- 4,999	24.79	29.10	27.73	18.57
5,000- 7,499	33.13	36.01	38.79	25.56
7,500- 9,999	51.18	49.14	58.30	47.56
10,000-12,499	72.03	76.01	81.56	61.30
12,500-14,999	104.56	98.39	107.58	104.19
15,000-17,499	131.14	154.72	134.41	122.30
17,500-19,999	148.16	142.85	156.90	139.24
20,000 and over	193.26	186.16	190.92	197.42
		1978		
0- 1,249	$ 27.92	$ 30.22	$ 26.00	$ 23.65
1,250- 2,499	28.02	30.20	30.53	22.07
2,500- 3,749	28.08	30.75	33.32	19.65
3,750- 4,999	28.54	33.24	32.46	20.80
5,000- 7,499	37.86	42.16	42.49	30.01
7,500- 9,999	59.33	56.16	72.68	51.69
10,000-12,499	91.15	96.61	98.09	81.98
12,500-14,999	118.11	122.35	128.22	107.50
15,000-17,499	150.87	179.18	153.74	140.37
17,500-19,999	195.17	259.96	179.93	201.69
20,000 and over	247.14	184.73	268.66	226.39
		1979		
0- 1,249	$ 31.84	$ 33.31	$ 31.52	$ 28.44
1,250- 2,499	31.86	35.78	32.01	25.19
2,500- 3,749	31.02	34.50	33.64	23.71
3,750- 4,999	32.26	37.68	34.27	25.02
5,000- 7,499	43.81	48.57	48.23	34.97
7,500- 9,999	69.98	67.09	83.64	60.10
10,000-12,499	106.12	112.48	114.04	94.01
12,500-14,999	139.26	145.70	150.77	125.12
15,000-17,499	191.82	186.10	196.77	187.71
17,500-19,999	240.59	140.99	237.83	245.15
20,000 and over	378.62	220.84	382.45	399.21

*Includes all charges for drilling and equipment wells up to and including the "Christmas" trees but excludes exploration, development and production costs and expenditures for service wells.

Source: American Petroleum Institute, Independent Petroleum Association of America, Mid-Continent Oil & Gas Association, *Joint Association Survey of Industry Drilling Costs.*

TABLE 24

NATURAL GAS TREATED FOR NATURAL GASOLINE AND ALLIED PRODUCTS, AND QUANTITIES AND VALUE OF PRODUCTS RECOVERED, 1955-1980[a]

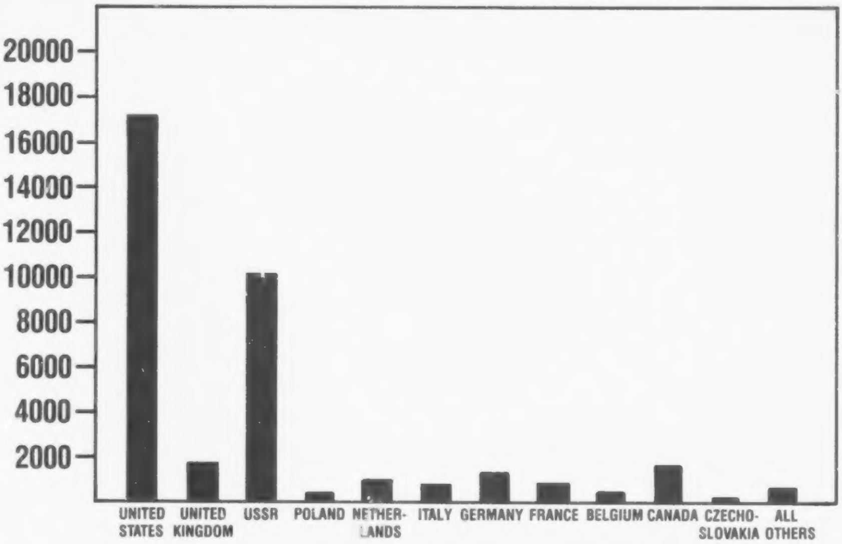
		Products Recovered							
	Natural Gas Treated	Natural Gasoline		Liquefied Petroleum Gases		Finished Gasoline and Naphtha		Other Products[b]	
Year	(Millions of cubic feet)	Quantity (Thousands of gallons)	Value (Thousands of dollars)	Quantity (Thousands of gallons)	Value (Thousands of dollars)	Quantity (Thousands of gallons)	Value (Thousands of dollars)	Quantity (Thousands of gallons)	Value (Thousands of dollars)
1955	8,185,953	4,457,079	$313,075	5,972,698	$ 195,231	823,103	$72,192	564,722	$ 38,508
1956	8,445,009	4,438,890	316,646	6,487,413	265,185	832,915	75,102	535,295	40,210
1957	8,578,561	4,499,495	305,937	6,655,282	263,665	779,807	72,154	455,005	37,700
1958	8,452,544	4,355,025	300,666	6,783,000	296,571	701,456	53,401	539,977	39,072
1959	9,186,862	4,222,266	290,311	7,874,706	349,802	660,666	56,517	714,170	61,866
1960	9,768,189	4,479,454	313,058	8,444,074	391,566	503,659	43,400	859,394	60,361
1961	10,261,669	4,666,319	311,966	9,085,465	370,186	473,496	31,996	965,648	68,057
1962	11,089,241	4,772,260	333,965	9,409,083	353,334	450,991	37,347	1,021,271	73,505
1963	12,430,353	4,899,323	320,131	10,302,250	359,770	499,901	40,922	1,135,743	78,120
1964	13,176,126	5,286,703	341,714	10,743,591	362,792	506,505	37,815	1,206,973	84,071
1965	13,772,101	5,457,367	360,603	11,257,267	417,249	439,267	36,270	1,391,436	97,481
1966	14,924,429	5,564,139	366,332	12,134,294	527,223	380,135	33,380	1,604,154	120,426
1967	15,641,633	5,850,271	389,156	13,717,861	632,994	307,263	28,044	1,731,727	129,742
1968	16,316,674	6,210,708	411,695	14,753,004	552,335	280,728	26,577	1,868,622	133,407
1969	17,655,108	6,633,018	457,986	15,895,194	498,927	374,514	36,954	1,467,396	108,144
1970	18,509,309	6,935,838	468,602	16,783,662	672,088	240,702	23,234	1,488,270	111,188
1971	19,252,807	6,942,474	496,676	17,540,628	769,397	224,784	23,210	1,240,344	96,771
1972	19,906,893	6,875,442	500,425	18,678,912	828,718	186,732	20,737	1,063,986	83,261
1973	19,679,291	6,791,736	568,214	18,775,386	1,188,289	136,038	13,902	942,606	86,668
1974	18,684,480	6,212,766	974,825	18,813,732	1,980,769	52,878	10,028	797,664	122,305
1975	17,748,426	5,620,608	777,637	18,651,612	1,893,890	45,528	8,411	712,488	92,650
1976	17,717,951	5,575,584	882,718	18,369,372	2,298,647	40,572	9,650	670,362	93,074
1977	17,569,835	5,587,134	c	18,604,152	c	30,156	c	577,668	c
1978	c	5,306,784	c	18,124,512	c	28,896	c	567,420	c
1979[R]	c	4,042,668	c	26,008,878	c	271,908	c	917,952	c
1980[p]	c	3,970,890	c	25,878,678	c	239,652	c	811,860	c

a. Due to changes in reporting requirements, 1979 data is not comparable with prior years.
b. Includes plant condensate, kerosene, distillate fuel oil, and miscellaneous products.
c. Not available.
Source: Energy Information Administration, U.S. Department of Energy.
p – Preliminary.
R – Revised.

CHART 8

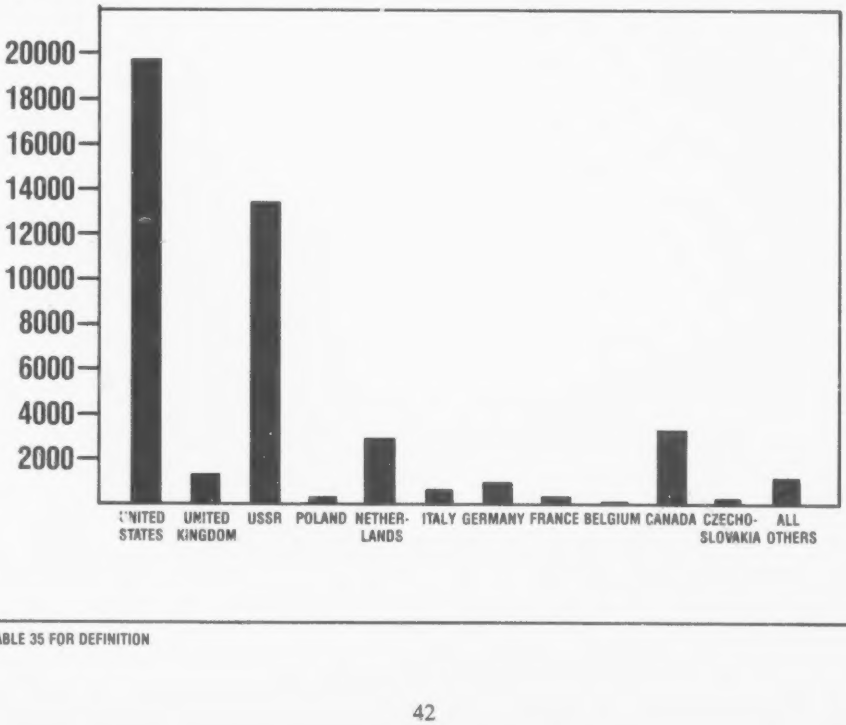
WORLD NATURAL GAS DIRECT FUEL USE* 1979

(TRILLIONS OF BTU)



WORLD NATURAL GAS PRODUCTION 1979

(TRILLIONS OF BTU)



*SEE TABLE 35 FOR DEFINITION

TABLE 36
WORLD WELL COMPLETIONS
1979

Area	Total	Producing	Total Footage (000 ft.)	Total Wildcats	Discoveries
North America	58,681	39,332	62,467	13,409	a
South America	a	a	a	a	a
Far East	a	1,017	a	a	a
Europe	863	538	3,194	325	a
Middle East	a	a	a	a	a
North Africa	353	260	2,919	93	a
Other Africa	248	137	2,300	111	a
Oceania	a	a	a	a	a
World Total	a	a	a	a	a

a. Not available.
Source: *Oil & Gas Journal.*

SECTION IV
UNDERGROUND GAS STORAGE

	1980	% Change 80/79
Number of Pools	401	+ 0.5
Est. Ultimate Capacity (Millions of cubic feet)	7,488,156	+ 0.7
Input to Storage (Millions of cubic feet)	2,057,209	− 10.0
Output from Storage (Millions of cubic feet)	2,114,494	+ 2.8
Maximum Day Output (Millions of cubic feet)	38,158	+ 1.6

TABLE 37

NUMBER OF UNDERGROUND STORAGE POOLS AND ULTIMATE CAPACITY IN THE UNITED STATES, 1955-1980

Year	Number of Pools	Number of States	Est. Ultimate Capacity (bill. cu. ft.)*
1955	178	18	2,084
1960	217	20	2,854
1965	293	24	4,086
1966	303	25	4,421
1967	308	25	4,520
1968	315	26	4,783
1969	320	26	4,927
1970	325	26	5,178
1971	333	26	5,575
1972	348	26	6,040
1973	360	26	6,279
1974	367	26	6,360
1975	376	26	6,644
1976	386	26	6,927
1977	385	26	7,223
1978	388	26	7,330
1979	399	26	7,437
1980	401	26	7,488

*At 14.73 psia and 60°F.

Source: A.G.A. *The Underground Storage of Gas in the United States and Canada.*

UNDERGROUND STORAGE

TABLE 38

NUMBER OF AQUIFER POOLS AND ULTIMATE CAPACITY IN THE UNITED STATES, 1955-1980[a]

Year	Number of Pools	Number of States	Est. Ultimate Capacity (bill. cu. ft.)[b]
1955	5	4	c
1960	14	8	c
1965	37	9	643
1966	37	9	647
1967	37	9	672
1968	40	10	759
1969	43	10	818
1970	43	9	968
1971	44	8	1,056
1972	46	9	1,278
1973	49	10	1,399
1974	51	10	1,408
1975	52	10	1,459
1976	52	10	1,484
1977	52	10	1,578
1978	53	10	1,593
1979	54	10	1,601
1980	57	10	1,449

a. These data are also in Table 37. b. At 14.73 psia and 60°F. c. Not available. a. Source: Same as Table 37.

TABLE 39

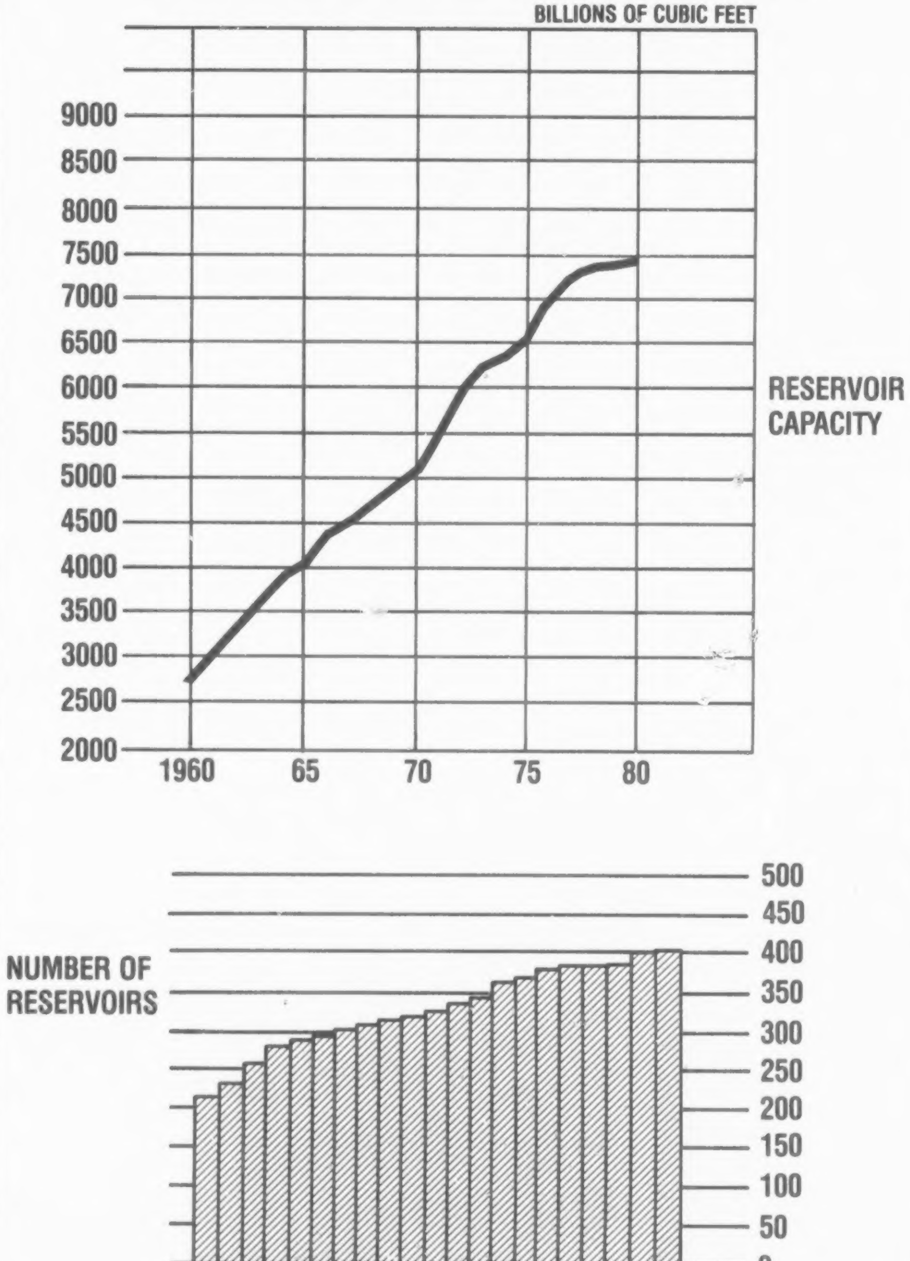
LIQUEFIED NATURAL GAS STORAGE OPERATIONS IN THE UNITED STATES AS OF SEPTEMBER 15, 1980[c]

	Presently Operating	Proposed or Pending Operation
Complete Plants		
Storage Capacity – MMcf	59,755	11,000
Gross Liquefication Capacity – MMcf/day	305	53
Sendout Capacity – MMcf/day	7,650	1,057
Number of Facilities	51	4
Satellite Plants		
Storage Capacity – MMcf	6,845	a
Sendout Capacity – MMcf/day	887	a
Number of Facilities	50	a
Import Terminals[b]		
Storage Capacity – MMcf	18,250	25,383
Sendout Capacity – MMcf/day	2,550	4,074
Number of Facilities	4	4

a. All plants presently operating.
b. Of those presently operating, Algonquin terminal has been utilized for domestic storage since 1973.
c. Data for Import Terminals as of March, 1980.
Source: *Pipeline and Gas Journal.*

CHART 9

NUMBER AND CAPACITY OF EXISTING UNDERGROUND STORAGE RESERVOIRS



REFERENCE TABLE 37

UNDERGROUND STORAGE

TABLE 40

INPUTS, OUTPUTS, AND GAS IN UNDERGROUND STORAGE, BY STATE, 1980

(Millions of cubic feet – 14.73 psia at 60°F.)

	Year Ending December 31, 1980					
Division and State	Input to Storage	Output from Storage	Native Gas	Stored Gas	Maximum Stored Gas	Maximum Day Output
United States*	**2,057,209**	**2,114,494**	**1,092,335**	**5,002,979**	**5,613,435**	**38,158**
New England	**0**	**0**	**0**	**0**	**0**	**0**
Connecticut	0	0	0	0	0	0
Maine	0	0	0	0	0	0
Massachusetts	0	0	0	0	0	0
New Hampshire	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0
Vermont	0	0	0	0	0	0
Middle Atlantic	**354,786**	**446,469**	**43,749**	**668,162**	**790,522**	**6,390**
New Jersey	0	0	0	0	0	0
New York	39,325	54,608	15,095	104,233	118,885	655
Pennsylvania	315,461	391,861	28,654	563,929	671,637	5,735
East North Central	**787,299**	**786,308**	**385,693**	**1,902,203**	**2,119,297**	**11,104**
Illinois	202,545	186,886	11,508	853,600	896,252	3,632
Indiana	23,237	24,892	20,621	87,512	91,600	439
Michigan	390,236	397,519	268,538	567,190	674,039	4,764
Ohio	171,281	177,011	85,026	393,901	457,406	2,269
Wisconsin	0	0	0	0	0	0
West North Central	**135,939**	**117,400**	**42,812**	**441,524**	**473,031**	**1,865**
Iowa	61,306	57,857	0	235,331	251,267	812
Kansas	58,094	50,601	19,821	114,788	130,021	903
Minnesota	1,148	557	0	5,138	5,228	45
Missouri	8,835	7,582	0	29,354	29,354	0
Nebraska	6,556	803	22,991	56,913	57,161	105
North Dakota	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0
South Atlantic	**161,478**	**183,497**	**65,867**	**425,340**	**465,520**	**3,773**
Delaware	0	0	0	0	0	0
Dist. of Columbia	0	0	0	0	0	0
Florida	0	0	0	0	0	0
Georgia	0	0	0	0	0	0
Maryland	16,927	20,927	32,456	23,670	29,658	994
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	0	0	0	0	0	0
West Virginia	144,551	162,570	33,411	401,670	435,862	2,779
East South Central	**97,208**	**110,757**	**107,336**	**171,731**	**282,050**	**2,377**
Alabama	0	0	0	0	0	0
Kentucky	50,616	62,589	80,004	102,766	200,154	1,089
Mississippi	46,592	48,168	27,332	68,965	81,896	1,288
Tennessee	0	0	0	0	0	0
West South Central	**335,601**	**322,332**	**194,717**	**824,824**	**894,098**	**7,532**
Arkansas	1,112	1,859	23,674	11,906	12,281	53
Louisiana	147,714	152,502	68,793	309,252	334,769	2,306
Oklahoma	111,488	102,328	29,161	274,178	301,653	1,724
Texas	75,287	65,643	73,089	229,488	245,395	3,449
Mountain	**77,689**	**45,293**	**99,068**	**257,837**	**267,216**	**1,115**
Arizona	0	0	0	0	0	0
Colorado	32,973	18,144	19,129	48,458	50,342	597
Idaho	0	0	0	0	0	0
Montana	29,751	15,634	46,938	142,341	146,788	252
Nevada	0	0	0	0	0	0
New Mexico	2,518	3,975	11,700	18,278	20,861	65
Utah	1,252	1,130	0	4,632	4,642	25
Wyoming	11,195	6,410	21,301	44,128	44,583	176
Pacific	**107,199**	**102,426**	**153,093**	**311,346**	**321,688**	**3,988**
Alaska	0	0	0	0	0	0
California	92,257	90,419	153,093	278,523	288,662	3,682
Hawaii	0	0	0	0	0	0
Oregon	0	0	0	0	0	0
Washington	14,942	12,007	0	32,823	33,026	306

*Totals may not add due to rounding.
Source: Same as Table 37.

TABLE 41
NUMBER OF POOLS, WELLS, COMPRESSOR STATIONS, AND HORSEPOWER IN UNDERGROUND STORAGE FIELDS, BY STATE, 1978-1980

Division and State	Number of Pools			Number of Active Wells		
	1978	1979	1980	1978	1979	1980
(1) **United States**	**388**	**399**	**401**	**17,297**	**17,605**	**17,559**
(2) **New England**	**0**	**0**	**0**	**0**	**0**	**0**
(3) **Middle Atlantic**	**86**	**95**	**93**	**2,821**	**3,012**	**2,848**
(4) New Jersey	0	0	0	0	0	0
(5) New York	19	20	20	762	928	767
(6) Pennsylvania	67	75	73	2,059	2,084	2,081
(7) **East North Central**	**127**	**128**	**132**	**8,640**	**8,725**	**8,691**
(8) Illinois	31	33	34	1,717	1,724	1,588
(9) Indiana	28	30	30	928	951	960
(10) Michigan	45	42	45	2,830	2,867	2,920
(11) Ohio	23	23	23	3,165	3,183	3,223
(12) Wisconsin	0	0	0	0	0	0
(13) **West North Central**	**29**	**31**	**30**	**1,387**	**1,386**	**1,363**
(14) Iowa	8	9	9	424	424	424
(15) Kansas	17	18	17	780	772	744
(16) Minnesota	1	1	1	55	61	61
(17) Missouri	1	1	1	82	82	82
(18) Nebraska	2	2	2	46	47	52
(19) North Dakota	0	0	0	0	0	0
(20) South Dakota	0	0	0	0	0	0
(21) **South Atlantic**	**39**	**38**	**38**	**1,594**	**1,595**	**1,605**
(22) Delaware	0	0	0	0	0	0
(23) District of Columbia	0	0	0	0	0	0
(24) Florida	0	0	0	0	0	0
(25) Georgia	0	0	0	0	0	0
(26) Maryland	1	1	1	77	79	80
(27) North Carolina	0	0	0	0	0	0
(28) South Carolina	0	0	0	0	0	0
(29) Virginia	0	0	0	0	0	0
(30) West Virginia	38	37	37	1,517	1,516	1,525
(31) **East South Central**	**27**	**27**	**27**	**1,298**	**1,297**	**1,315**
(32) Alabama	0	0	0	0	0	0
(33) Kentucky	23	23	23	1,201	1,197	1,214
(34) Mississippi	4	4	4	97	100	101
(35) Tennessee	0	0	0	0	0	0
(36) **West South Central**	**43**	**43**	**44**	**751**	**750**	**851**
(37) Arkansas	5	5	5	22	22	23
(38) Louisiana	6	6	7	193	191	272
(39) Oklahoma	13	14	14	281	281	300
(40) Texas	19	18	18	255	256	256
(41) **Mountain**	**26**	**26**	**26**	**329**	**354**	**392**
(42) Arizona	0	0	0	0	0	0
(43) Colorado	7	8	8	99	122	155
(44) Idaho	0	0	0	0	0	0
(45) Montana	5	5	5	137	137	139
(46) Nevada	0	0	0	0	0	0
(47) New Mexico	2	2	3	46	47	50
(48) Utah	2	2	2	15	15	15
(49) Wyoming	10	9	8	32	33	33
(50) **Pacific**	**11**	**11**	**11**	**477**	**486**	**494**
(51) Alaska	0	0	0	0	0	0
(52) California	9	9	9	400	409	417
(53) Hawaii	0	0	0	0	0	0
(54) Oregon	0	0	0	0	0	0
(55) Washington	2	2	2	77	77	77

Source: Same as Table 37.

TABLE 41 (Continued)

NUMBER OF POOLS, WELLS, COMPRESSOR STATIONS, AND HORSEPOWER IN UNDERGROUND STORAGE FIELDS, BY STATE, 1978-1980

Number of Compressor Stations			Total HP Installed in Compressor Stations			
1978	1979	1980	1978	1979	1980	
270	**283**	**285**	**1,495,712**	**1,804,552**	**1,559,708**	(1)
0	**0**	**0**	**0**	**0**	**0**	(2)
59	**62**	**62**	**222,410**	**256,670**	**239,950**	(3)
0	0	0	0	0	0	(4)
12	13	12	27,050	30,450	17,990	(5)
47	49	50	195,360	226,220	221,960	(6)
82	**86**	**87**	**616,071**	**883,261**	**632,661**	(7)
27	27	28	217,435	217,795	220,125	(8)
15	19	17	18,901	19,651	19,551	(9)
22	22	24	300,960	566,480	313,650	(10)
18	18	18	78,775	79,335	79,335	(11)
0	0	0	0	0	0	(12)
16	**18**	**17**	**83,130**	**81,810**	**77,315**	(13)
4	4	4	43,000	41,680	37,680	(14)
8	10	9	19,930	19,930	19,435	(15)
1	1	1	2,400	2,400	2,400	(16)
1	1	1	8,850	8,850	8,850	(17)
2	2	2	8,950	8,950	8,950	(18)
0	0	0	0	0	0	(19)
0	0	0	0	0	0	(20)
20	**22**	**20**	**88,760**	**92,760**	**91,410**	(21)
0	0	0	0	0	0	(22)
0	0	0	0	0	0	(23)
0	0	0	0	0	0	(24)
0	0	0	0	0	0	(25)
1	1	1	11,000	11,000	11,000	(26)
0	0	0	0	0	0	(27)
0	0	0	0	0	0	(28)
0	0	0	0	0	0	(29)
19	21	19	77,760	81,760	80,410	(30)
20	**20**	**20**	**72,010**	**72,010**	**74,260**	(31)
0	0	0	0	0	0	(32)
17	17	17	36,210	36,210	38,460	(33)
3	3	3	35,800	35,800	35,800	(34)
0	0	0	0	0	0	(35)
39	**41**	**43**	**227,184**	**227,944**	**252,124**	(36)
5	5	5	1,470	1,470	1,470	(37)
6	6	7	94,200	93,640	109,040	(38)
10	10	11	71,469	73,219	80,569	(39)
18	20	20	60,045	59,615	61,045	(40)
23	**23**	**25**	**58,937**	**62,867**	**64,758**	(41)
0	0	0	0	0	0	(42)
6	7	6	25,095	29,025	28,950	(43)
0	0	0	0	0	0	(44)
5	5	6	23,150	23,150	23,440	(45)
0	0	0	0	0	0	(46)
2	1	4	800	800	3,350	(47)
2	2	2	1,200	1,200	1,200	(48)
8	8	7	8,692	8,692	7,818	(49)
11	**11**	**11**	**127,210**	**127,230**	**127,230**	(50)
0	0	0	0	0	0	(51)
10	10	10	115,410	115,430	115,430	(52)
0	0	0	0	0	0	(53)
0	0	0	0	0	0	(54)
1	1	1	11,800	11,800	11,800	(55)

TABLE 42
ULTIMATE CAPACITY OF EXISTING RESERVOIRS, BY STATE, 1980*

(Millions of cubic feet – 14.73 psia at 60°F.)

Division and State	Cushion Gas			Working Gas	Ultimate Reservoir Capacity
	Native	Injected	Total		
United States[a]	**1,079,756**	**2,326,507**	**3,406,264**	**2,689,050**	**7,488,156**
New England	**0**	**0**	**0**	**0**	**0**
Connecticut	0	0	0	0	0
Maine	0	0	0	0	0
Massachusetts	0	0	0	0	0
New Hampshire	0	0	0	0	0
Rhode Island	0	0	0	0	0
Vermont	0	0	0	0	0
Middle Atlantic	**43,749**	**375,035**	**418,785**	**293,127**	**912,349**
New Jersey	0	0	0	0	0
New York	15,095	64,198	79,293	40,035	153,921
Pennsylvania	28,654	310,837	339,492	253,092	758,428
East North Central	**375,174**	**1,007,532**	**1,382,707**	**905,189**	**2,744,455**
Illinois	11,369	545,040	556,409	308,698	944,045
Indiana	20,621	54,674	75,296	32,838	172,932
Michigan	258,158	154,981	413,139	422,589	1,007,497
Ohio	85,026	252,837	337,863	141,064	619,981
Wisconsin	0	0	0	0	0
West North Central	**42,812**	**207,258**	**250,071**	**234,263**	**664,659**
Iowa	0	117,751	117,751	117,580	354,500
Kansas	19,821	71,092	90,914	43,695	152,046
Minnesota	0	3,136	3,136	2,001	20,000
Missouri	0	11,759	11,759	17,595	45,000
Nebraska	22,991	3,520	26,511	53,392	93,113
North Dakota	0	0	0	0	0
South Dakota	0	0	0	0	0
South Atlantic	**65,867**	**237,199**	**303,066**	**188,141**	**572,363**
Delaware	0	0	0	0	0
Dist. of Col.	0	0	0	0	0
Florida	0	0	0	0	0
Georgia	0	0	0	0	0
Maryland	32,456	8,861	41,317	14,809	64,770
North Carolina	0	0	0	0	0
South Carolina	0	0	0	0	0
Virginia	0	0	0	0	0
West Virginia	33,411	228,338	261,749	173,332	507,593
East South Central	**106,324**	**47,104**	**153,428**	**125,628**	**318,068**
Alabama	0	0	0	0	0
Kentucky	79,002	28,338	107,340	75,430	209,781
Mississippi	27,322	18,766	46,089	50,198	108,287
Tennessee	0	0	0	0	0
West South Central	**193,730**	**310,454**	**504,186**	**515,356**	**1,292,530**
Arkansas	23,674	0	23,674	11,906	41,661
Louisiana	68,793	166,196	234,989	143,056	483,213
Oklahoma	29,161	127,375	156,537	146,802	401,427
Texas	72,102	16,883	88,986	213,592	366,229
Mountain	**99,068**	**50,500**	**149,568**	**207,334**	**452,181**
Arizona	0	0	0	0	0
Colorado	19,129	18,792	37,921	29,665	77,352
Idaho	0	0	0	0	0
Montana	46,938	15,200	62,138	127,141	219,611
Nevada	0	0	0	0	0
New Mexico	11,700	6,538	18,238	11,740	48,744
Utah	0	2,806	2,806	1,825	4,913
Wyoming	21,301	7,164	28,465	36,963	101,561
Pacific	**153,022**	**91,417**	**244,440**	**219,999**	**531,544**
Alaska	0	0	0	0	0
California	153,022	70,517	223,540	208,076	498,518
Hawaii	0	0	0	0	0
Oregon	0	0	0	0	0
Washington	0	20,900	20,900	11,923	33,026

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*In some states or regions, the difference between the sum of the components and Ultimate Reservoir Capacity represents presently unused capacity.

[a] Totals may not add due to rounding.

Source: Same as Table 37.

SECTION V
TRANSMISSION AND DISTRIBUTION

	1980	% Change 80/79
Miles of Pipeline (Thousands)		
Total	1,050.2	+ 2.0
Field & Gathering	83.2	+ 6.9
Transmission	266.9	+ 1.3
Distribution	700.1	+ 1.7
Miles Installed (Thousands)	18.6	−21.4

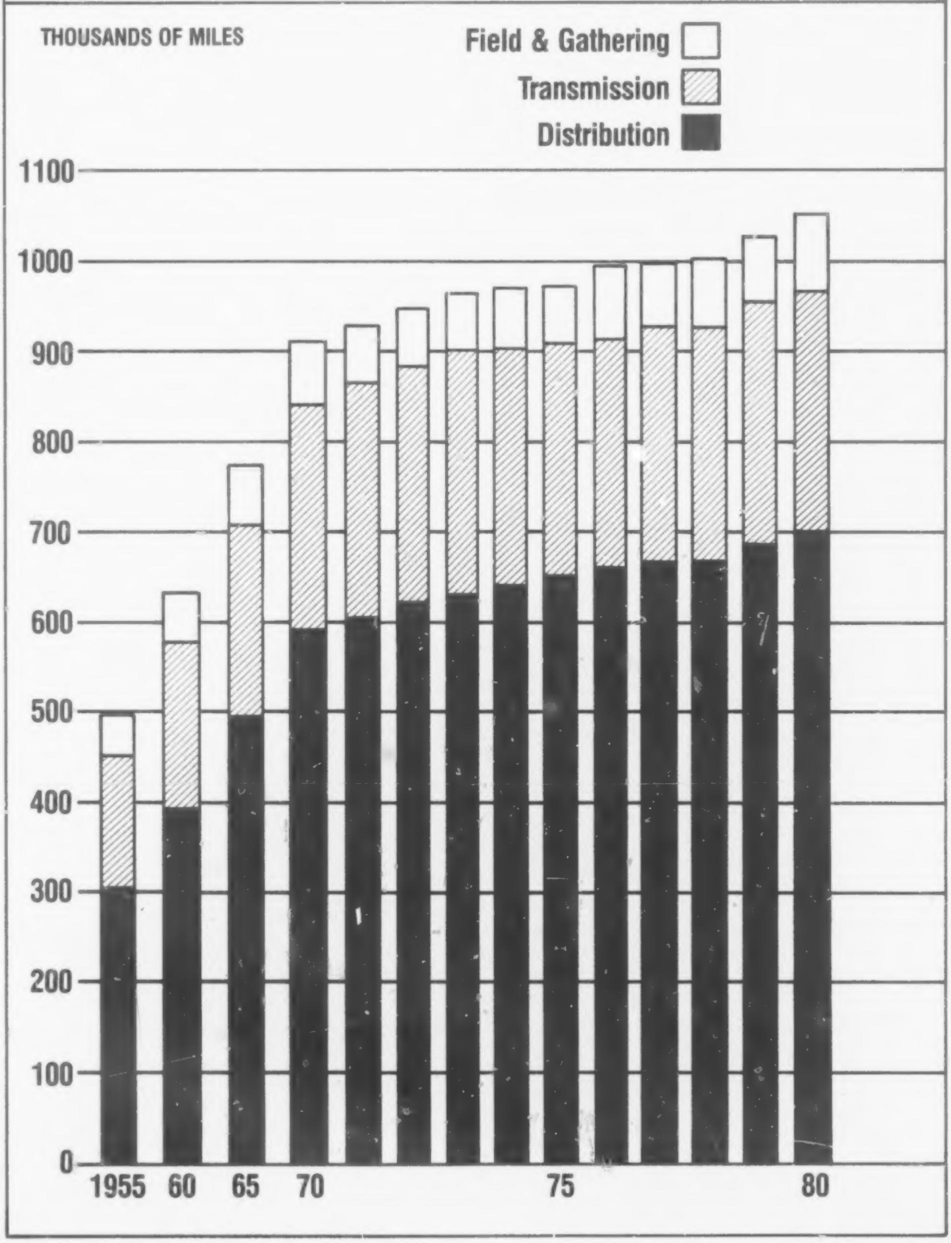
TABLE 35
WORLD NATURAL GAS STATISTICS
1979

Country	Production	Imports	Exports	Direct Fuel Use[a]	Residential Consumers (000)	Miles of Pipeline (000)
	(Trillions of Btu)					
United States[b]	19,884	1,275	61	17,182	42,183[c]	1,013[c]
United Kingdom	1,461	331	–	1,757	14,846	139
USSR	13,479	–	–	10,365	21,994	157
Poland	212	133	–	254	1,948	–
Netherlands	2,811	62	1,571	953	4,390	56
Italy	499[c]	514[c]	–	784[c]	7,250[c]	42[c]
Germany	804	1,499	18	1,320	11,073	107
France	287	656	7	868	8,148	66
Belgium	1	431	8	311	1,761	17
Canada	3,336	.078	1,001	1,659[c]	2,219	92
Czechoslovakia	27	237	–	160	2,025	14
Others	1,139	339	816	379	4,447	39

a. Does not include supplies for production of electric energy; for cracking, reforming and mixing processes; for raw material; for manufacturing of non-energy products.
b. Does not cross-check with other data in this publication due to different source.
c. 1978.
Source: Annual Bulletin of Gas Statistics for Europe, United Nations.

CHART 10

GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN



REFERENCE: TABLE 44

TRANSMISSION AND DISTRIBUTION

TABLE 43
GAS UTILITY INDUSTRY INSTALLED COMPRESSOR HORSEPOWER, 1955-1980

(Thousands)

Year	Total	Transmission
1955	5,517	4,350
1960	7,843	6,359
1961	8,169	6,696
1962	8,609	7,064
1963	8,818	7,261
1964	9,309	7,546
1965	9,708	7,736
1966	10,242	8,182
1967	10,746	8,596
1968	11,438	9,146
1969	12,742	9,375
1970	13,150	9,692
1971	14,142	10,763
1972	14,506	10,976
1973	14,858	11,272
1974	15,181	11,883*
1975	15,413	12,069
1976	15,472	12,046
1977	15,553	12,105
1978	15,824	12,255
1979	16,030	12,437
1980	16,359	12,818

*Not comparable to previous years due to reclassification.

TABLE 44
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN, BY TYPE, 1955-1980[a]

(Thousands)

Year	Total	Field and Gathering	Transmission Pipeline[b]	Distribution Main
1955	496.7	45.7	145.9	305.1
1960	630.9	55.8	183.7	391.4
1961	659.0	56.7	191.9	410.4
1962	683.2	58.7	196.4	428.1
1963	709.9	60.7	200.9	448.3
1964	736.2	61.0	205.4	469.8
1965	767.5	61.7	211.3	494.5
1966	799.6	63.0	217.0	519.6
1967	828.3	63.7	225.4	539.2
1968	861.6	64.4	234.5	562.7
1969	891.6	64.9	248.1	578.6
1970	913.3	66.3	252.2	594.8
1971	931.4	66.2	254.8	610.4
1972	948.1	66.9	258.1	623.1
1973	962.9	65.9	263.1	633.8
1974	974.1	66.4	262.2	645.6
1975	979.3	68.5	262.6	648.2
1976	987.7	70.3	258.2	659.1
1977	998.9	71.5	260.5	666.9
1978	1013.0	74.9	260.6	677.5
1979	1029.8	77.8	263.5	688.5
1980	1050.2	83.2	266.9	700.1
Steel	905.1	82.8	262.2	560.1
Plastic[c]	82.9	0.4	4.4	78.1
Other	62.2	d	0.3	61.9

a. Includes data for Hawaii subsequent to 1959 and for Alaska subsequent to 1960; excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of end of each year.

b. Includes 3.6 thousand miles of Underground Storage pipe in 1971, 3.3 thousand miles in 1972, 3.4 thousand miles in 1973, 4.9 thousand miles in 1974, 5.0 thousand miles in 1975, 5.3 thousand miles in 1976, 5.2 thousand miles in 1977, 6.0 thousand miles in 1978, 5.7 thousand miles in 1979, and 6.2 thousand miles in 1980, some of which was formerly included in Field and Gathering pipe.

c. Includes fiberglass.

d. Less than 50 miles.

TABLE 45
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN, BY TYPE AND BY STATE, 1980[a]

Division and State	Total	Field and Gathering	Transmission Pipeline[b]	Distribution Main
United States	**1,050,159**	**83,216**	**266,912**	**700,031**
New England	**27,777**	**0**	**1,612**	**26,165**
Connecticut	6,733	0	502	6,231
Maine	395	0	80	315
Massachusetts	16,717	0	800	15,917
New Hampshire	1,154	0	122	1,032
Rhode Island	2,374	0	53	2,321
Vermont	404	0	55	349
Middle Atlantic	**116,578**	**6,410**	**17,232**	**92,936**
New Jersey	22,838	0	1,339	21,499
New York	41,396	451	3,993	36,952
Pennsylvania	52,344	5,959	11,900	34,485
East North Central	**200,146**	**4,433**	**36,175**	**159,538**
Illinois	53,205	137	9,794	43,274
Indiana	28,335	248	5,622	22,465
Michigan	44,016	231	7,393	36,392
Ohio	52,667	3,817	10,195	38,655
Wisconsin	21,923	0	3,171	18,752
West North Central	**112,680**	**8,903**	**39,676**	**64,101**
Iowa	17,899	89	5,985	11,825
Kansas	36,793	8,600	15,919	12,274
Minnesota	16,730	0	4,025	12,705
Missouri	21,695	34	4,146	17,515
Nebraska	14,087	45	7,518	6,524
North Dakota	2,854	123	1,138	1,593
South Dakota	2,609	12	945	1,652
South Atlantic	**104,733**	**8,896**	**21,894**	**73,943**
Delaware	1,336	0	227	1,109
District of Columbia	1,157	0	23	1,134
Florida	13,835	19	3,063	10,753
Georgia	24,693	11	5,124	19,558
Maryland	8,704	24	846	7,834
North Carolina	11,846	0	2,279	9,567
South Carolina	9,910	0	2,299	7,611
Virginia	11,219	98	2,434	8,687
West Virginia	22,033	8,744	5,599	7,690
East South Central	**73,608**	**3,944**	**27,016**	**42,648**
Alabama	19,539	7	5,390	14,142
Kentucky	19,939	3,685	6,930	9,324
Mississippi	17,838	250	9,431	8,157
Tennessee	16,292	2	5,265	11,025
West South Central	**216,109**	**31,119**	**84,308**	**100,682**
Arkansas	18,033	891	6,676	10,466
Louisiana	41,816	2,870	22,404	16,542
Oklahoma	37,132	10,002	12,195	14,935
Texas	119,141	17,356	43,033	58,752
Mountain	**95,845**	**18,628**	**27,812**	**49,405**
Arizona	16,569	1	5,080	11,488
Colorado	22,670	2,866	6,439	13,365
Idaho	4,177	0	1,322	2,855
Montana	8,822	2,586	3,097	3,139
Nevada	3,554	5	1,275	2,274
New Mexico	24,349	9,977	6,171	8,201
Utah	7,909	725	944	6,240
Wyoming	7,795	2,468	3,484	1,843
Pacific	**102,683**	**883**	**11,187**	**90,613**
Alaska	1,186	7	211	968
California	79,625	867	7,910	70,848
Hawaii	587	0	0	587
Oregon	9,709	9	1,189	8,511
Washington	11,576	0	1,877	9,699

a. Excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of end of year.
b. Includes 6,228 miles of underground storage pipe.

TRANSMISSION AND DISTRIBUTION

TABLE 46
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN, BY STATE, 1955–1980[a]

Division and State	1955	1960	1965	1970	1975	1979	1980[d]
United States	**496,740**	**630,950**	**767,520**	**913,267**	**979,263**	**1,029,727**	**1,050,159**
New England	**17,000**	**19,140**	**22,090**	**25,686**	**26,580**	**26,923**	**27,777**
Connecticut	3,720	4,300	4,960	5,728	5,991	6,066	6,733
Maine	430	390	390	705	461	395	395
Massachusetts	10,570	11,910	13,740	15,609	16,452	16,552	16,717
New Hampshire	540	630	800	1,041	1,093	1,220	1,154
Rhode Island	1,520	1,720	1,990	2,299	2,248	2,355	2,374
Vermont	220	190	210	304	335	335	404
Middle Atlantic	**80,710**	**92,600**	**102,580**	**111,644**	**113,993**	**114,839**	**116,578**
New Jersey	12,420	15,140	18,320	21,052	22,077	22,470	22,838
New York	28,440	33,020	36,580	39,955	40,535	40,528	41,396
Pennsylvania	39,850	44,440	47,680	50,637	51,381	51,841	52,344
East North Central	**90,210**	**113,420**	**147,640**	**178,268**	**190,172**	**196,887**	**200,146**
Illinois	21,250	27,770	38,750	46,683	50,252	52,553	53,205
Indiana	11,840	14,800	20,240	25,264	27,267	27,964	28,335
Michigan	16,810	21,860	30,370	37,699	40,203	42,849	44,016
Ohio	34,180	40,150	44,690	49,393	51,505	51,917	52,667
Wisconsin	6,130	8,840	13,590	19,229	20,945	21,604	21,923
West North Central	**55,200**	**67,640**	**82,250**	**99,536**	**106,134**	**111,538**	**112,680**
Iowa	7,840	9,970	13,630	16,654	17,273	17,959	17,899
Kansas	22,910	25,860	28,780	32,802	34,280	36,233	36,793
Minnesota	5,360	8,090	10,680	14,162	15,264	16,524	16,730
Missouri	9,770	11,950	15,150	18,654	20,897	21,587	21,695
Nebraska	7,320	8,910	10,300	12,627	13,333	13,897	14,087
North Dakota	930	1,100	1,560	2,332	2,533	2,769	2,854
South Dakota	1,070	1,760	2,150	2,305	2,554	2,569	2,609
South Atlantic	**43,260**	**59,100**	**74,180**	**92,738**	**100,496**	**103,488**	**104,733**
Delaware	560	830	1,160	1,270	1,322	1,327	1,336
District of Columbia	1,140	1,160	1,150	1,164	1,163	1,154	1,157
Florida	3,220	6,400	8,330	11,435	13,100	13,742	13,835
Georgia	6,430	10,580	14,600	19,549	22,679	24,278	24,693
Maryland	4,430	5,400	6,710	7,986	8,534	8,628	8,704
North Carolina	2,290	4,830	7,080	10,605	11,100	11,575	11,846
South Carolina	1,350	3,320	6,090	8,514	9,667	9,861	9,910
Virginia	4,750	6,490	8,190	10,451	10,944	11,088	11,219
West Virginia	19,090	20,090	20,870	21,764	21,987	21,835	22,033
East South Central	**33,390**	**44,930**	**54,390**	**65,441**	**70,345**	**72,614**	**73,608**
Alabama	8,220	11,380	13,860	16,607	17,832	18,977	19,539
Kentucky	9,790	13,130	15,470	18,295	19,816	19,831	19,939
Mississippi	9,020	11,420	13,460	16,403	17,056	17,794	17,838
Tennessee	6,360	9,000	11,600	14,136	15,641	16,012	16,292
West South Central	**99,330**	**127,120**	**150,260**	**182,752**	**194,820**	**208,723**	**216,109**
Arkansas	8,700	10,380	13,060	16,429	17,474	17,988	18,033
Louisiana	17,820	24,970	30,310	36,921	38,855	42,481	41,816
Oklahoma	16,080	19,590	23,850	28,532	32,798	36,030	37,132
Texas	56,730	72,180	83,040	100,870	105,693	112,224	119,141
Mountain	**29,630**	**44,940**	**59,900**	**71,848**	**83,184**	**94,021**	**95,845**
Arizona	6,770	9,630	11,120	13,379	15,197	16,423	16,569
Colorado	5,530	8,080	12,240	15,870	19,192	21,652	22,670
Idaho	20	1,490	2,770	3,226	3,785	4,108	4,177
Montana	4,120	5,120	5,970	6,324	7,435	8,572	8,822
Nevada	300	660	1,940	2,470	2,945	3,423	3,554
New Mexico	8,320	13,160	15,410	19,050	21,657	23,688	24,349
Utah	2,160	3,400	4,940	5,609	6,577	7,834	7,909
Wyoming	2,410	3,400	4,610	5,920	6,396	8,321	7,795
Pacific	**48,010**	**62,060**	**75,130**	**85,354**	**93,539**	**100,694**	**102,683**
Alaska	c	c	250	667	868	1,184	1,186
California	43,070	52,280	60,650	66,328	72,493	78,104	79,625
Hawaii	b	440	490	530	581	588	587
Oregon	2,720	3,940	6,360	8,014	8,838	9,489	9,709
Washington	2,220	5,400	7,380	9,815	10,759	11,329	11,576

a. Includes field, gathering, underground storage, transmission and distribution main but excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of end of year.

b. Excludes data for Alaska prior to 1959 and Hawaii prior to 1960.

c. Not available.

d. Part of 1980 increase over 1979 due to more complete reporting.

TABLE 47

GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN INSTALLED DURING 1980, BY TYPE, BY STATE AND BY TYPE OF PIPE[a]

		Field and Gathering	Transmission Pipeline	Distribution Main			
Division and State	Total	Steel	Steel[b]	Total	Steel	Plastic[c]	Other
United States	**18,550**	**3,091**	**2,191**	**13,268**	**4,581**	**8,628**	**59**
New England	**281**	**0**	**0**	**281**	**153**	**128**	**0**
Connecticut	77	0	0	77	47	30	0
Maine	4	0	0	4	0	4	0
Massachusetts	159	0	0	159	82	77	0
New Hampshire	19	0	0	19	15	4	0
Rhode Island	22	0	0	22	9	13	0
Vermont	0	0	0	0	0	0	0
Middle Atlantic	**1,459**	**52**	**89**	**1,318**	**444**	**871**	**3**
New Jersey	461	0	3	458	174	284	0
New York	403	11	0	392	81	310	1
Pennsylvania	595	41	86	468	189	277	2
East North Central	**3,784**	**19**	**163**	**3,602**	**1,288**	**2,313**	**1**
Illinois	1,133	0	30	1,103	782	320	1
Indiana	454	0	0	454	106	348	0
Michigan	1,222	5	91	1,126	97	1,029	0
Ohio	596	14	42	540	276	264	0
Wisconsin	379	0	0	379	27	352	0
West North Central	**1,846**	**304**	**147**	**1,395**	**392**	**999**	**4**
Iowa	316	0	10	306	89	217	0
Kansas	572	259	40	273	129	140	4
Minnesota	498	0	29	469	36	433	0
Missouri	122	0	0	122	43	79	0
Nebraska	199	5	63	131	76	55	0
North Dakota	95	34	5	56	4	52	0
South Dakota	44	6	0	38	15	23	0
South Atlantic	**1,234**	**68**	**42**	**1,124**	**772**	**347**	**5**
Delaware	23	0	0	23	5	18	0
Dist. of Columbia	10	0	0	10	5	5	0
Florida	65	0	0	65	61	4	0
Georgia	427	0	3	424	408	16	0
Maryland	95	0	3	92	55	37	0
North Carolina	272	0	9	263	160	103	0
South Carolina	84	0	0	84	37	47	0
Virginia	131	2	10	119	32	82	5
West Virginia	127	66	17	44	9	35	0
East South Central	**702**	**19**	**97**	**586**	**306**	**234**	**46**
Alabama	164	7	15	142	43	99	0
Kentucky	143	6	23	114	99	15	0
Mississippi	244	6	54	184	82	56	46
Tennessee	151	0	5	146	82	64	0
West South Central	**4,192**	**1,458**	**1,154**	**1,580**	**360**	**1,220**	**0**
Arkansas	52	1	23	28	17	11	0
Louisiana	646	135	341	170	81	89	0
Oklahoma	1,263	823	70	370	5	365	0
Texas	2,231	499	720	1,012	257	755	0
Mountain	**2,514**	**1,134**	**411**	**969**	**311**	**658**	**0**
Arizona	187	0	19	168	32	136	0
Colorado	676	197	116	363	95	268	0
Idaho	75	0	8	67	8	59	0
Montana	186	126	11	49	1	48	0
Nevada	131	0	5	126	31	95	0
New Mexico	626	344	123	159	141	18	0
Utah	96	83	13	0	0	0	0
Wyoming	537	384	116	37	3	34	0
Pacific	**2,538**	**37**	**88**	**2,413**	**555**	**1,858**	**0**
Alaska	0	0	0	0	0	0	0
California	1,932	30	80	1,822	205	1,617	0
Hawaii	5	0	0	5	0	5	0
Oregon	279	7	4	268	268	0	0
Washington	322	0	4	318	82	236	0

a. Excludes service pipe. Data not adjusted to common diameter equivalent.
b. Includes 130 miles of underground storage pipe.
c. Includes fiberglass.

TRANSMISSION AND DISTRIBUTION

TABLE 48
STEEL AND OTHER METALS USED BY THE GAS UTILITY INDUSTRY, 1956-1980[a]

Type of Material	1956	1960	1964	1968	1972	1976	1978	1980
Steel, Total (000 Tons)	**1,465**	**2,238**	**1,449**	**2,138**	**877**	**580**	**552**	**958**
Pipe, Total	1,451	2,227	1,446	2,132	876	577	544	930
Pipe under 6"	360	339	367	340	214	250	256	198
Pipe 6"-14"	425	434	375	319	275	215	240	390
Pipe 16"-22"	b	229	177	179	188	80	29	162
Pipe 24" and over	666	1,225	527	1,294	198	32	19	180
Other Steel	14	11	3	6	1	3	8	28
Cast Iron (000 Tons)	**128**	**35**	**19**	**11**	**1**	c	c	c
Copper (Tons)	**1,460**	**1,125**	**3,626**	**2,863**	**1,464**	**189**	**138**	**34**
Aluminum (Tons)	**256**	**34**	**31**	**138**	**20**	d	d	d
Plastic Pipe (Tons)	e	e	**848**	**3,728**	**8,790**	**13,460**	**24,725**	**41,034**

a. Includes usage of transmission companies, but excludes requirements for natural gas production facilities.
b. Included in Pipe 24" and over.
c. Less than 500 tons.
d. Not available due to insufficient reporting.
e. Not available.

TABLE 49
GAS UTILITY INDUSTRY REQUIREMENTS OF STEEL PIPE FOR NEW CONSTRUCTION AND MAINTENANCE AND REPAIR BY SIZE OF PIPE, 1980

(Thousands of tons)

Size of Pipe	Total	New Construction	Maintenance Repair
Normal Pipe Size – Inches			
3/4 and less	6.8	6.2	0.6
1	7.9	7.2	0.7
1 1/4	9.6	8.8	0.8
1 1/2	2.2	2.0	0.2
Outside Diameter – Inches			
2 3/8	41.9	37.1	4.8
3 1/2	28.8	20.1	8.7
4 1/2	126.2	119.7	6.5
6 5/8	111.3	105.5	5.8
8 5/8	144.9	137.2	7.7
10 3/4	39.6	38.5	1.1
12 3/4	127.9	118.4	9.5
14	0.1	0.1	a
16	124.2	122.3	1.9
18	0.6	0.4	0.2
20	44.3	44.2	0.1
22	7.2	4.9	2.3
24	14.2	13.7	0.5
26	0.4	0.4	a
30	0.5	0.4	0.1
34	7.5	7.5	0.0
36	23.9	23.9	0.0
42	0.1	0.1	0.0
Other Sizes	0.2	0.2	a
Total	**870.3**	**818.8**	**51.5**

a. Less than 50 tons.

TABLE 50
SELECTED STATISTICS FOR MAJOR TRANSMISSION COMPANIES

			1980	
Name of Transmission System	No. of Transmission Stations	Total Miles of Transmission Pipeline	Peak Day Sendout (MMCF)	Operating Revenues ($000,000)
Algonquin Gas Transmission Co.	3	909	837	$ 504.2
Cities Service Gas Co.	38	5,832	a	731.7
Colorado Interstate Gas Co.	18	2,726	1,458	869.1
Columbia Gas Transmission Co.	90	9,975	6,706	2,822.3
Columbia Gulf Transmission Co.	13	3,965	1,545	162.0
Consolidated Gas Supply Corp.	43	3,598	4,503	1,708.9
East Tennessee Natural Gas Co.	10	1,012	359	196.2
El Paso Natural Gas Co.	52	9,418	3,580	2,932.5
Florida Gas Transmission Co.	20	4,328	846	464.8
Michigan Wisconsin Pipeline Co.	41	7,662	3,766	1,951.1
Midwestern Gas Transmission Co.	15	903	1,053	1,053.2
Mississippi River Transmission Co.	15	1,969	1,027	523.3
Natural Gas Pipeline Co. of America	77	10,433	5,195	2,298.1
Northern Natural Gas Co.	60	18,438	3,599	1,739.8
Pacific Gas Transmission Co.	13	637	1,292	1,405.3
Panhandle Eastern Pipeline Co.	70	6,766	2,773	1,515.5
South Georgia Natural Gas Co.	2	768	107	95.7
Southern Natural Gas Co.	41	7,097	2,248	1,407.4
Tenneco, Inc.	60	13,546	4,061	2,552.6
Texas Eastern Transmission Corp.	75	9,030	4,024	2,068.6
Texas Gas Transmission Corp.	21	5,888	2,423	1,353.7
Transcontinental Gas Pipeline Corp.	38	9,442	7,239	2,536.1
Transwestern Pipeline Co.	158	3,679	1,009	719.6
Trunkline Gas Co.	21	3,887	1,693	1,100.2
United Gas Pipeline Co.	30	7,308	5,081	2,462.8

a. Not available.
Source: Federal Energy Regulatory Commission

TABLE 51
MARKETED PRODUCTION AND INTERSTATE MOVEMENTS OF NATURAL GAS, 1979
(Millions of cubic feet)

Division and State	Marketed Production	Interstate Movements	
		Receipts[a]	Deliveries[b]
United States	**20,471,260**	**51,771,846**	**50,574,136**
New England	**0**	**482,481**	**208,675**
Connecticut	0	152,009	82,026
Maine	0	17,444[c]	1,855[c]
Massachusetts	0	220,228	60,060
New Hampshire	0	d	d
Rhode Island	0	92,800	64,734
Vermont	0	d	d
Middle Atlantic	**111,813**	**3,598,584**	**1,972,804**
New Jersey	0	664,027	390,995
New York	15,500	948,092	302,390
Pennsylvania	96,313	1,986,465	1,279,419
East North Central	**285,097**	**7,998,388**	**4,293,668**
Illinois	1,585	2,239,878	1,031,254
Indiana	350	1,776,965	1,259,512
Michigan	159,731	806,346	393
Ohio	123,431	2,694,620	1,889,780
Wisconsin	0	480,579	112,729
West North Central	**820,352**	**6,385,532**	**5,317,028**
Iowa	0	1,182,263	874,890
Kansas	797,762	1,753,120	1,899,244
Minnesota	0	623,882	283,878
Missouri	0	1,657,515	1,303,530
Nebraska	3,208	1,129,595	954,368
North Dakota	18,468	13,548	720
South Dakota	914	25,609	398
South Atlantic	**209,267**	**5,979,363**	**4,696,288**
Delaware	0	26,992	1,684
District of Columbia	e	e	e
Florida	50,190	307,587	0
Georgia	0	1,128,896	810,314
Maryland	28[f]	912,808[f]	707,568[f]
North Carolina	0	661,536	528,650
South Carolina	0	783,573	661,536
Virginia	8,544	880,271	750,366
West Virginia	150,505	1,277,700	1,236,170
East South Central	**290,353**	**15,597,994**	**14,885,651**
Alabama	85,815	2,720,629	2,517,934
Kentucky	59,520	3,590,045	3,414,944
Mississippi	144,077	5,459,097	5,355,528
Tennessee	941	3,828,223	3,597,245
West South Central	**16,385,658**	**5,790,572**	**14,428,252**
Arkansas	109,452	2,610,559	2,454,689
Louisiana	7,266,217	1,290,824	6,397,908
Oklahoma	1,835,366	1,073,641	1,988,047
Texas	7,174,623	815,548	3,587,608
Mountain	**1,899,758**	**3,130,888**	**3,794,547**
Arizona	247	1,328,521	1,155,480
Colorado	191,239	274,941	149,485
Idaho	0	524,760	470,848
Montana	53,888	60,402	35,068
Nevada	0	85,313	0
New Mexico	1,181,363	632,203	1,544,893
Utah	58,605	144,159	70,397
Wyoming	414,416	80,589	368,376
Pacific	**468,962**	**2,808,044**	**977,223**
Alaska	220,754	0	51,289
California	248,206	1,626,812	0
Hawaii	0	0	0
Oregon	2	513,926	420,936
Washington	0	667,306	505,0[illegible]

a. Includes receipts from Canada of 431,334 million cubic feet into Idaho; 239,368 million cubic feet into Washington; 286,290 million cubic feet into Minnesota; 30,081 million cubic feet into Montana; 9,157 million cubic feet into New York; 4,545 million cubic feet into Vermont; and from Algeria 136,313 million cubic feet into Maryland; 87,729 million cubic feet into Georgia and 28,566 million cubic feet into Massachusetts.

b. Includes deliveries to Japan of 51,289 million cubic feet from Alaska; to Mexico 3,602 million cubic feet from Texas and 706 million cubic feet from Arizona; and to Canada 76 million cubic feet from Montana.

c. Includes New Hampshire and Vermont.

d. Included in Maine.

e. Included in Maryland.

f. Includes District of Columbia.

Source: Energy Information Administration, U.S. Dept. of Energy, *Natural Gas Annual.*

SECTION VI
ENERGY CONSUMPTION

	1980	% Change 80/79
Annual Consumption		
(Trillions of Btu)		
Total	76,086	−2.6
Natural Gas Dry	20,494	+2.9
Crude Petroleum	34,197	−7.9
Bituminous & Lignite	15,566	+2.8
Hydropower	3,125	−1.2
Nuclear	2,704	−1.7

TABLE 52

ANNUAL CONSUMPTION OF ENERGY RESOURCES BY MAJOR SOURCES IN THE UNITED STATES, BY CONSUMING SECTORS, 1973-1980[a]

(Trillions of Btu)

Consuming sectors	Anthracite	Bituminous Coal and Lignite	Natural gas dry[b]	Petroleum[c]	Hydropower[d]	Nuclear power[d]	Total gross energy inputs[e]	Utility electricity purchased[f]	Total sector energy inputs
Household and commercial:									
1973	74	222	7,633	6,697	–	–	14,626	3,723	18,349
1974	66	232	7,518	6,099	–	–	13,915	3,726	17,641
1975	57	189	7,589	5,747	–	–	13,582	3,970	17,552
1976	58	181	8,117	6,333	–	–	14,689	4,143	18,832
1977	g	225	7,536	6,869	–	–	14,630	3,936	18,566
1978[R]	g	250	7,624	6,268	–	–	14,142	4,100	18,242
1979[R]	g	210	7,891	5,027	–	–	13,128	4,167	17,312
1980	g	166	7,637	4,365	–	–	12,168	4,354	16,522
Industrial:									
1973	33	4,344	10,454	6,076	38	–	20,945	2,644	23,589
1974	35	4,094[h]	10,018	5,909	33	–	20,089	2,670	22,759
1975	35	3,786[h]	8,551	5,544	35	–	17,951	2,580	20,531
1976	36	3,782	8,382	6,166	33	–	18,399	2,810	21,209
1977	g	3,509[h]	8,564	7,106	37	–	19,216	2,635	21,851
1978	g	3,593[h]	8,400	7,179	36	–	19,208	2,732	21,940
1979[R]	g	3,707[h]	8,554	9,401	34	–	21,696	2,873	24,569
1980	g	3,283[h]	8,460	8,857	33	–	20,633	2,781	23,414
Transportation:[i]									
1973	–	3	744	18,192	–	–	18,939	15	18,954
1974	–	2	685	17,734	–	–	18,421	16	18,437
1975	–	1	595	17,933	–	–	18,529	16	18,545
1976	–	j	582	18,733	–	–	19,315	16	19,331
1977	–	–	543	19,173	–	–	19,716	10	19,726
1978	–	–	539	20,057	–	–	20,596	9	20,605
1979[R]	–	–	612	19,303	–	–	19,915	10	19,925
1980	–	–	606	17,987	–	–	18,593	11	18,604
Electricity generation, utilities:									
1973	37	8,581	3,681	3,656	2,971	888	19,814	6,382	–
1974	38	8,482	3,512	3,480	3,276	1,211	19,999	6,412	–
1975	38	8,722	3,213	3,239	3,194	1,833	20,239	6,566	–
1976	38	9,653	3,134	3,479	3,031	2,032	21,367	6,969	–
1977	g	10,245	3,285	4,028	2,482	2,702	22,742	6,581	–
1978	g	10,134	3,297	3,813	3,132	2,977	23,353	6,841	–
1979[R]	g	11,258	3,610	3,392	3,132	2,748	24,140	7,050	–
1980	g	12,117	3,791	2,988	3,092	2,704	24,692	7,145	–
Miscellaneous and unaccounted for:									
1973	–	–	–	231	–	–	231	–	231
1974	–	–	–	245	–	–	245	–	245
1975	–	–	–	278	–	–	278	–	278
1976	–	–	–	227	–	–	227	–	227
1977	–	–	–	k	–	–	k	–	k
1978	–	–	–	k	–	–	k	–	k
1979	–	–	–	k	–	–	k	–	k
1980	–	–	–	k	–	–	k	–	k
Total gross energy inputs:									
1973	144	13,150	22,512	34,852	3,009	888	74,555	–	61,123
1974	139	12,810[h]	21,733	33,467	3,309	1,211	72,669	–	59,082
1975	130	12,698[h]	19,948	32,741	3,229	1,833	70,579	–	56,906
1976	132	13,616	20,215	34,938	3,064	2,032	73,997	–	59,600
1977	g	13,979[h]	19,928	37,176	2,519	2,702	76,304	–	60,143
1978[R]	g	13,977[h]	19,860	37,317	3,168	2,977	77,299	–	60,787
1979[R]	g	15,175[h]	20,667	37,123	3,166	2,748	78,879	–	61,806
1980	g	15,566[h]	20,494	34,197	3,125	2,704	76,086	–	58,540

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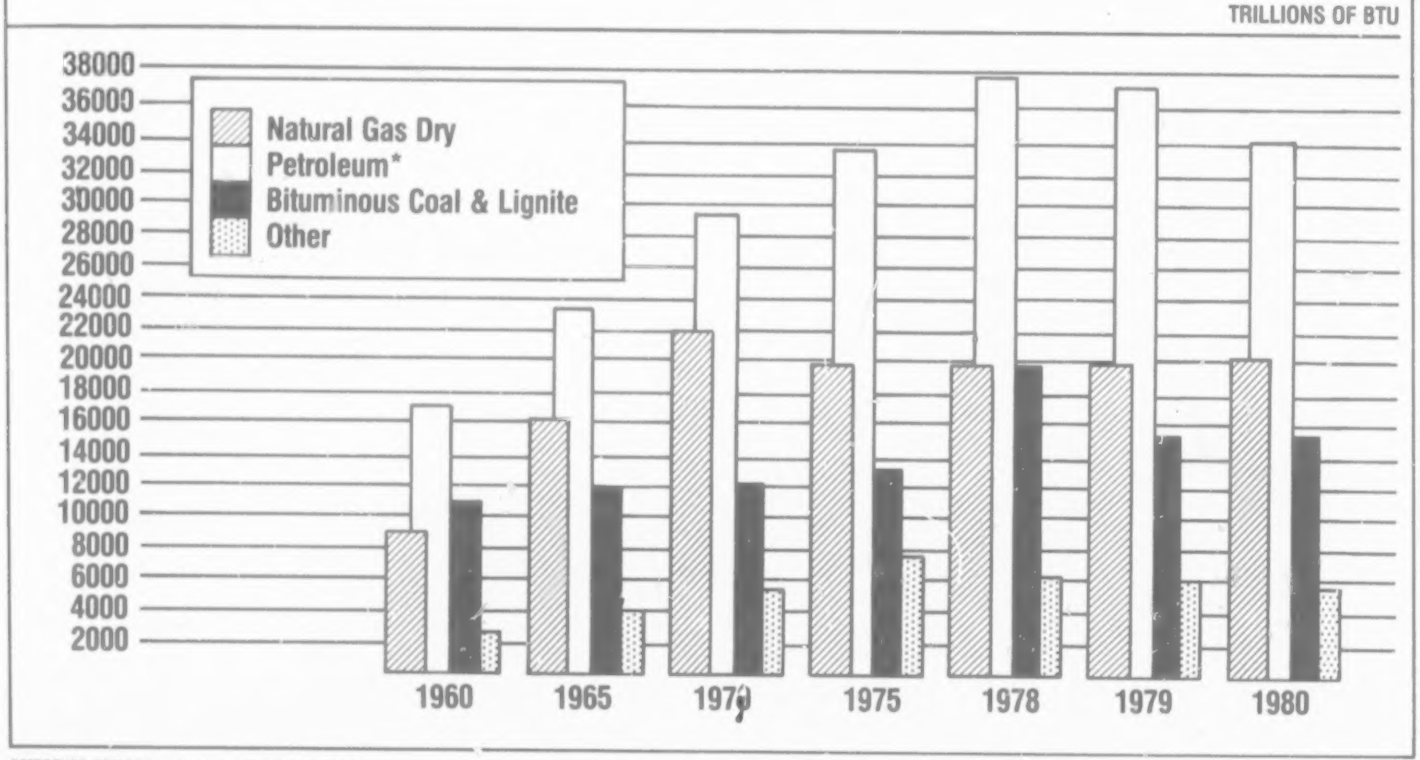
a. Gross energy is the total of inputs into the economy of the primary fuels (including imports) or their derivatives, plus the generation of hydro and nuclear power (converted to equivalent energy inputs).
b. Excludes natural gas liquids.
c. Petroleum products including still gas, liquefied refinery gas and natural gas liquids.
d. Outputs and hydropower (adjusted for net imports or net exports) are converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants provided by the Federal Power Commission using 10,383 Btu per net KWH for 1975. Energy input for nuclear power converted at an average heat rate of 10,660 Btu per net KWH based on information from the Atomic Energy Commission. Excludes inputs for power generated by non-utility plants, which are included within the other consuming sectors.
e. Gross energy resource inputs with electricity generation shown as separate consuming sector.
f. Utility electricity generated and imported, distributed to the other consuming sectors as energy resource inputs. Distribution to sectors is based on historical series in Edison Electric Institute Statistical Yearbook. Conversion of electricity to energy equivalent by sector was made at the value of contained energy corresponding to 100 percent thermal efficiency using a theoretical rate of 3,412 Btu/KWH.
g. Included in "Bituminous Coal and Lignite."
h. Includes net imports of coke of 59 trillion Btu in1974, 14 trillion Btu in 1975, 15 trillion Btu in 1977, 131 trillion Btu in 1978, 66 trillion Btu in 1979, and – 37 trillion Btu in 1980.
i. Includes bunkers and military transportation.
j. Less than 0.5 trillions of Btu. k. Not available. R – Revised.

Source: Prior to 1977, U.S. Bureau of Mines, 1977 and beyond, *Monthly Energy Review*, U.S. Department of Energy.

CHART 11

UNITED STATES ENERGY CONSUMPTION



REFERENCE: TABLE 53 *Includes Natural Gas Liquids

TABLE 53

ANNUAL CONSUMPTION OF FOSSIL ENERGY RESOURCES AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER IN THE UNITED STATES, 1955-1980[a]

(Trillions of Btu)[b]

Year	Natural Gas Dry[c]	Natural Gas Liquids	Crude Petroleum and Products	Bituminous Coal and Lignite	Anthracite Coal	Hydro-power[d]	Nuclear[d]	Grand Total Energy[h]
1955	9,232	1,196	16,328	11,104	599	1,497	–	39,956
1956	9,834	1,209	17,418	11,338	619	1,598	–	42,007
1957	10,416	1,242	17,328	10,838	528	1,567	–	41,920
1958	10,995	1,240	17,428	9,607	483	1,740	–	41,493
1959	11,991	1,348	18,399	9,596	478	1,695	–	43,507
1960	12,736	1,427	18,608	9,967	447	1,626	5	44,816
1961	13,228	1,498	18,989	9,809	404	1,628	17	45,573
1962	14,027	1,586	19,681	10,160	363	1,780	23	47,620
1963	14,843	1,703	20,247	10,722	361	1,740	33	49,649
1964	15,515	1,772	20,700	11,295	365	1,873	34	51,554
1965	16,097	1,853	21,566	12,030	328	2,057	38	53,969
1966	17,393	1,989	22,405	12,740	290	2,073	58	56,948
1967	18,250	2,043	23,292	11,982	274	2,344	80	58,265
1968	19,580	2,239	24,813	12,401	258	2,342	130	61,763
1969	21,020	2,459	25,962	12,509	224	2,659	146	64,979
1970	22,029	2,494	27,043	12,488	210	2,650	229	67,143
1971	22,470	2,496	28,074	11,858	187	2,862	404	68,351
1972	22,698	2,706	30,260	12,273	150	2,946	576	71,609
1973	22,512	2,652	32,200	13,150	144	3,009	888	74,555
1974[R]	21,733	2,565	30,902	12,935[e]	139	3,309	1,211	72,794
1975[R]	19,948	2,484	30,257	12,837[e]	130	3,219	1,833	70,708
1976[R]	20,345	f	34,938	13,733	132	3,066	2,032	74,246
1977[R]	19,931	f	37,176	13,980[e]	g	2,515	2,702	76,304
1978[R]	20,000	f	37,965	13,977[e]	g	3,164	2,977	78,083
1979[R]	20,666	f	37,123	15,175[e]	g	3,166	2,748	78,878
1980	20,494	f	34,197	15,566[e]	g	3,125	2,704	76,086

a. Represents production minus exports plus imports, and adjusted for change in inventories.

b. The Btu value per cubic foot for natural gas dry for 1964 and prior years is 1,035; for 1965-1968 1,032; for 1969, 1971 and 1972 1,031; for 1973 1,027; for 1974 1,021; for 1975 1,024; for 1976-1977 1,021; 1978 1,019; 1979-1980 1,021. See Table 19 for Btu values assigned to other energy sources.

c. Marketed production minus shrinkage caused by liquids extraction (34 cubic feet per gallon produced).

d. See Table 19 for procedures used to determine Btu equivalents.

e. Includes net imports of coke of 59 trillion Btu in 1974 and 14 trillion Btu in 1975, 15 trillion Btu in 1977, 131 trillion Btu in 1978, 66 trillion Btu in 1979, and −37 trillion Btu in 1980.

f. Included in "Crude Petroleum and Products."

g. Included in "Bituminous Coal and Lignite."

h. Does not include energy from geothermal, wood or waste products.

R – Revised.

Source: Prior to 1977, U.S. Bureau of Mines. 1977 and beyond, *Monthly Energy Review*, U.S. Department of Energy.

ENERGY CONSUMPTION

TABLE 54

ANNUAL CONSUMPTION OF FOSSIL ENERGY RESOURCES AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER IN THE UNITED STATES, 1955-1980

(Percentage)

Year	Natural Gas Dry	Natural Gas Liquids	Crude Petroleum and Products	Bituminous Coal and Lignite	Anthracite Coal	Hydro-power	Nuclear	Grand Total Energy
1955	23.1	3.0	40.8	27.8	1.5	3.8	–	100.0
1960	28.4	3.2	41.6	22.2	1.0	3.6	a	100.0
1961	29.0	3.3	41.6	21.5	0.9	3.6	0.1	100.0
1962	29.5	3.3	41.3	21.3	0.8	3.7	0.1	100.0
1963	29.9	3.4	40.8	21.6	0.7	3.5	0.1	100.0
1964	30.5	3.4	39.9	21.8	0.7	3.6	0.1	100.0
1965	29.8	3.4	40.0	22.3	0.6	3.8	0.1	100.0
1966	30.9	3.5	39.7	22.4	0.5	3.7	0.1	100.0
1967	31.3	3.5	40.0	20.6	0.5	4.0	0.1	100.0
1968	31.7	3.6	40.2	20.1	0.4	3.8	0.2	100.0
1969	32.4	3.8	39.9	19.3	0.3	4.1	0.2	100.0
1970	32.8	3.7	40.3	18.6	0.3	4.0	0.3	100.0
1971	32.9	3.7	41.1	17.3	0.3	4.2	0.6	100.0
1972	31.7	3.8	42.3	17.1	0.2	4.1	0.8	100.0
1973	30.2	3.6	43.2	17.6	0.2	4.0	1.2	100.0
1974	29.9	3.5	42.5	17.6	0.2	4.6	1.7	100.0
1975	28.3	3.5	42.8	18.0	0.2	4.6	2.6	100.0
1976	27.3	3.4	43.8	18.4	0.2	4.1	2.7	100.0
1977	26.1	c	48.6	18.5	b	3.3	3.5	100.0
1978	25.4	c	48.6	18.2	b	4.0	3.8	100.0
1979	25.5	c	47.6	19.3	b	4.1	3.5	100.0
1980	26.9	c	44.9	20.5	b	4.1	3.6	100.0

a. Less than 0.05.
b. Included in "Bituminous Coal and Lignite."
c. Included in "Crude Petroleum and Products."

Source: Same as Table 53.

TABLE 55

ENERGY CONSUMPTION PER CAPITA IN THE UNITED STATES, 1955-1980*

Year	Total Energy Consumed (Trillions of Btu)	Natural Gas Consumed (Trillions of Btu)	Resident Population (Thousands)	Energy Consumed Per Capita (Millions of Btu)	Natural Gas Consumed Per Capita (Millions of Btu)	Gross National Product (1972 $)	Total Energy Per Dollar of GNP (1972 $)	Index of Industrial Production (1972 = 100)
1955	39,956	9,232	164,309	243	56	654.8	61.0	53.0
1960	44,816	12,736	179,992	249	71	736.8	60.8	59.7
1961	45,573	13,228	183,057	249	72	755.3	60.3	60.2
1962	47,620	14,027	185,890	256	75	799.1	59.6	64.9
1963	49,649	14,843	188,658	263	79	830.7	59.8	68.2
1964	51,554	15,515	191,372	269	81	874.4	59.0	72.7
1965	53,969	16,097	193,815	278	83	925.9	58.3	78.7
1966	56,412	17,393	195,936	288	89	981.0	57.5	78.0
1967	58,265	18,250	197,859	294	92	1,007.7	57.8	86.8
1968	61,763	19,580	199,846	309	98	1,051.8	58.7	90.8
1969	64,979	21,020	201,423	323	104	1,078.8	60.2	96.1
1970[R]	67,143	22,029	203,302	330	108	1,075.3	62.4	92.5
1971[R]	68,348	22,469	206,827	331	109	1,107.5	61.7	92.7
1972[R]	71,609	22,698	209,284	342	108	1,171.1	61.1	100.0
1973[R]	74,609	22,512	211,357	353	107	1,233.4	60.5	109.0
1974[R]	72,759	21,733	213,342	341	102	1,210.7	60.1	108.3
1975[R]	70,707	19,948	215,465	328	93	1,191.7	59.3	102.3
1976[R]	74,510	20,345	217,563	343	94	1,274.7	58.4	112.7
1977[R]	76,332	19,931	219,760	347	91	1,337.3	57.1	118.9
1978[R]	78,150	20,000	222,095	352	90	1,399.2	55.8	126.8
1979[R]	78,968	20,666	224,567	352	92	1,431.6	55.2	132.1
1980	76,201	20,494	226,505	336	90	1,480.9	51.5	147.1

*Alaska and Hawaii included subsequent to 1958.
R-Revised.
Sources: U.S. Department of Energy, U.S. Bureau of the Census and the Federal Reserve Board.

TABLE 56
GAS UTILITY INDUSTRY AVERAGE ANNUAL CONSUMPTION PER CUSTOMER, BY CLASS OF SERVICE 1955-1980[a]

(MMBtu/Customer)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1955	233.8	85.2	294.5	29,167.5	10,250.9
1956	245.6	90.5	306.4	30,752.8	8,996.6
1957	252.8	92.5	316.1	30,663.6	11,309.1
1958	257.0	97.7	334.5	30,375.6	10,770.1
1959	274.2	100.7	350.1	33,478.4	11,836.6
1960	281.0	104.8	374.2	33,495.0	12,577.5
1961	283.4	106.7	390.7	32,621.7	13,468.7
1962	295.1	110.9	420.7	32,713.9	13,795.1
1963	302.8	112.1	430.6	33,630.8	13,460.2
1964	317.9	115.3	469.5	37,089.1	13,234.6
1965	320.9	116.5	482.1	36,982.6	12,009.8
1966	336.4	118.8	510.0	38,259.3	12,755.1
1967	345.2	121.5	537.8	38,710.3	11,397.0
1968	362.4	124.1	567.6	40,378.0	13,129.2
1969	376.7	128.4	611.0	42,220.0	11,327.2
1970	386.8	129.2	640.9	42,386.7	12,232.3
1971	395.0	129.9	673.8	42,235.0	17,064.6
1972	397.7	130.4	697.3	41,948.8	16,428.8
1973	377.0	124.5	684.6	40,051.7	15,129.5
1974	361.1	119.6	676.1	42,066.8	12,586.1
1975	333.6	121.9	708.9	37,253.5	12,039.8
1976	329.7	121.3	718.6	39,563.9	5,128.6
1977	316.8	118.7	714.8	38,717.2	5,809.3
1978	322.2	121.0	743.6	36,167.9	6,490.4
1979	330.3	118.6	726.5	39,434.4	7,033.6
1980	327.6	111.4	699.4	41,870.8	5,911.6

a. Excludes customers purchasing for resale and sales for resale. Customer data is based on yearly averages. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.

b. Prior to 1976, "Other" electric generation (See Table 72) is included in the "Other" class of service. For 1976 and beyond, all electric generation is included in the Industrial category.

ENERGY CONSUMPTION

TABLE 57
GAS UTILITY INDUSTRY AVERAGE ANNUAL CONSUMPTION PER CUSTOMER BY STATE AND CLASS OF SERVICE, 1980[a]

(MMBtu/Customer)

Division and State	Total	Class of Service			
		Residential	Commercial	Industrial	Other
United States	**327.6**	**111.4**	**699.4**	**41,870.8**	**5,911.6**
New England	**172.1**	**90.1**	**657.1**	**7,762.3**	**909.4**
Connecticut	181.1	88.0	617.1	8,806.1	1,344.2
Maine	144.2	43.2	405.1	18,209.8	0.2
Massachusetts	169.1	91.3	726.1	7,399.8	952.4
New Hampshire	195.1	101.0	564.5	9,752.3	1,241.9
Rhode Island	157.0	86.9	415.8	5,763.8	b
Vermont	268.8	102.8	671.2	66,962.5	539.7
Middle Atlantic	**205.9**	**104.7**	**531.2**	**22,425.0**	**3,025.1**
New Jersey	171.8	89.7	403.2	16,296.9	19,265.4
New York	157.6	93.5	478.0	11,383.7	2,644.5
Pennsylvania	311.9	134.4	770.6	48,434.5	4,169.7
East North Central	**339.4**	**158.6**	**918.0**	**28,394.0**	**3,383.9**
Illinois	333.2	162.5	965.5	19,281.9	698.7
Indiana	382.9	143.8	673.2	54,553.1	3,878.2
Michigan	347.9	172.8	1,170.3	27,718.4	4,318.8
Ohio	323.3	158.3	851.3	50,211.1	3,830.9
Wisconsin	329.9	130.8	736.6	19,756.4	9,178.1
West North Central	**342.2**	**131.2**	**784.8**	**41,326.5**	**7,459.9**
Iowa	343.1	127.7	653.3	61,072.5	2,284.6
Kansas	503.6	126.5	729.4	47,088.8	19,904.2
Minnesota	330.1	138.9	811.7	22,131.8	14,809.4
Missouri	268.3	133.2	1,006.1	106,136.0	2,230.6
Nebraska	344.6	128.9	621.2	36,172.5	546.2
North Dakota	252.0	127.6	1,049.7	24,671.4	b
South Dakota	233.8	117.4	653.4	10,560.6	48,500.0
South Atlantic	**317.0**	**93.7**	**724.4**	**49,761.4**	**5,321.1**
Delaware	278.0	93.4	792.0	62,429.5	7,004.2
District of Columbia	185.5	103.5	889.1	b	b
Florida	538.6	44.9	1,046.9	386,884.4	3,507.1
Georgia	291.4	97.1	726.5	67,336.8	3,126.2
Maryland	199.9	96.6	589.9	12,123.5	1,296.7
North Carolina	390.6	97.1	556.0	44,844.3	1,506.2
South Carolina	471.2	74.7	611.0	61,817.7	8,085.7
Virginia	257.7	99.7	773.7	22,414.7	2,756.4
West Virginia	327.8	131.3	758.5	136,836.4	3,422.7
East South Central	**364.6**	**102.3**	**554.1**	**70,686.6**	**1,934.6**
Alabama	329.2	86.7	546.6	71,277.9	366.0
Kentucky	280.7	130.3	600.7	54,308.5	4,610.6
Mississippi	481.9	85.9	404.8	112,379.2	4,792.5
Tennessee	423.5	101.6	612.7	56,564.4	679.9
West South Central	**641.7**	**84.4**	**531.2**	**104,926.3**	**20,491.6**
Arkansas	428.3	95.6	488.9	74,344.3	11,569.7
Louisiana	514.3	77.2	413.7	166,129.0	11,377.8
Oklahoma	574.3	103.8	593.5	96,994.1	7,361.5
Texas	731.0	80.2	552.2	101,451.8	23,254.8
Mountain	**313.9**	**103.6**	**668.2**	**46,194.1**	**5,088.1**
Arizona	236.5	58.9	485.1	36,722.7	4,133.8
Colorado	284.7	119.7	743.5	48,219.6	8,745.7
Idaho	417.6	79.5	584.8	128,915.4	b
Montana	296.1	126.1	728.1	32,756.6	73,622.2
Nevada	369.1	87.4	1,605.9	638,925.9	115,900.0
New Mexico	380.0	99.1	518.8	21,202.4	4,043.4
Utah	337.0	139.0	647.5	96,514.2	11,800.0
Wyoming	599.1	134.5	669.6	160,611.5	2,435.0
Pacific	**242.9**	**81.6**	**696.5**	**27,287.7**	**6,466.6**
Alaska	766.7	216.9	727.5	32,407.6	b
California	233.3	80.5	715.8	26,676.1	6,186.3
Hawaii	104.4	25.0	388.5	1,097.0	b
Oregon	277.6	79.8	472.1	66,036.6	b
Washington	357.8	95.5	716.6	55,859.7	8,871.1

a. Excludes customers purchasing for resale and sales for resale. Customer data is based on yearly averages.
b. No sales reported.

TABLE 58
GAS UTILITY INDUSTRY AVERAGE ANNUAL RESIDENTIAL CONSUMPTION PER CUSTOMER BY STATE, 1955-1980[a]

(MMBtu/Customer)

Division and State	1955	1960	1965	1970	1975	1979	1980
United States	**85.2**	**104.8**	**116.5**	**129.2**	**121.9**	**118.6**	**111.4**
New England	**28.8**	**49.5**	**67.7**	**86.0**	**85.3**	**87.4**	**90.1**
Connecticut	29.5	51.2	68.7	87.6	84.6	87.8	88.0
Maine	24.5	29.3	32.1	38.2	38.7	38.5	43.2
Massachusetts	29.9	50.2	69.2	87.0	86.0	87.5	91.3
New Hampshire	29.5	51.4	74.1	93.3	95.1	84.2	101.0
Rhode Island	23.2	47.6	65.0	82.9	84.0	89.4	86.9
Vermont	15.3	19.9	23.1	65.2	93.3	108.4	102.8
Middle Atlantic	**59.0**	**77.6**	**91.2**	**107.3**	**102.1**	**103.4**	**104.7**
New Jersey	36.1	56.9	73.5	92.2	88.5	86.9	89.7
New York	45.6	63.3	77.7	91.5	89.4	91.3	93.5
Pennsylvania	98.6	117.8	128.7	146.5	135.1	136.5	134.4
East North Central	**103.3**	**137.1**	**159.3**	**175.7**	**164.5**	**167.8**	**158.6**
Illinois	73.0	109.4	139.9	164.8	168.9	176.0	162.5
Indiana	72.7	103.5	134.1	159.9	151.5	155.3	143.8
Michigan	101.5	146.4	173.5	189.1	167.7	176.0	172.8
Ohio	159.2	183.0	188.5	193.5	171.2	167.5	158.3
Wisconsin	56.6	92.2	129.0	145.0	139.0	137.0	130.8
West North Central	**130.0**	**151.0**	**158.9**	**167.9**	**152.6**	**146.2**	**131.2**
Iowa	117.6	149.3	162.1	167.8	152.2	145.8	127.7
Kansas	149.4	157.0	156.6	165.8	150.4	146.1	126.5
Minnesota	126.0	145.9	167.3	175.6	159.7	155.8	138.9
Missouri	124.4	149.9	152.0	165.5	148.9	148.5	133.2
Nebraska	140.0	160.5	162.3	167.5	155.2	151.8	128.9
North Dakota	95.8	118.8	164.5	171.4	163.0	159.1	127.6
South Dakota	125.8	145.8	158.5	153.2	145.0	141.3	117.4
South Atlantic	**78.9**	**93.1**	**95.9**	**111.0**	**96.3**	**95.4**	**93.7**
Delaware	37.2	63.7	85.6	109.0	93.6	95.7	93.4
District of Columbia	68.3	79.8	87.8	102.7	95.9	101.7	103.5
Florida	23.3	19.6	27.1	48.2	38.6	46.8	44.9
Georgia	97.0	110.9	103.1	123.9	103.5	98.3	97.1
Maryland	62.8	84.3	95.3	110.6	97.5	98.4	96.6
North Carolina	41.2	78.2	89.8	112.1	92.7	97.8	97.1
South Carolina	36.3	68.8	75.9	91.1	72.7	79.6	74.7
Virginia	62.6	83.4	94.0	111.1	100.1	100.7	99.7
West Virginia	156.9	163.5	159.0	161.0	149.4	135.7	131.3
East South Central	**105.5**	**118.1**	**111.5**	**126.0**	**107.1**	**107.4**	**102.3**
Alabama	86.7	96.6	90.7	106.9	91.2	88.1	86.7
Kentucky	136.5	153.3	144.9	157.4	136.7	138.3	130.3
Mississippi	86.3	97.7	89.0	105.5	86.6	88.7	85.9
Tennessee	104.2	118.6	114.3	126.5	105.5	109.5	101.6
West South Central	**83.4**	**96.5**	**92.2**	**104.6**	**95.9**	**92.5**	**84.4**
Arkansas	104.6	121.7	113.8	133.0	114.0	104.8	95.6
Louisiana	74.7	87.4	82.1	95.9	81.9	85.0	77.2
Oklahoma	108.2	114.9	116.3	126.8	120.6	115.8	103.8
Texas	76.4	91.2	86.3	97.6	91.5	87.0	80.2
Mountain	**132.6**	**138.2**	**140.2**	**140.5**	**131.0**	**117.2**	**103.6**
Arizona	68.1	75.3	77.0	78.4	77.3	66.0	58.9
Colorado	147.3	150.1	153.4	155.0	147.2	134.9	119.7
Idaho	33.3	100.5	118.0	114.7	110.7	94.1	79.5
Montana	184.3	175.9	185.0	175.5	171.2	155.0	126.1
Nevada	62.4	88.8	103.1	112.5	113.2	97.1	87.4
New Mexico	113.2	133.1	134.4	130.3	126.6	109.1	99.1
Utah	175.7	202.4	201.2	212.1	180.1	152.0	139.0
Wyoming	189.3	173.9	173.0	180.5	161.7	150.2	134.5
Pacific	**89.7**	**92.3**	**104.6**	**105.7**	**109.9**	**92.7**	**81.6**
Alaska	b	b	230.0	199.3	221.3	201.7	216.9
California	91.5	93.2	105.0	104.6	109.4	91.8	80.5
Hawaii	b	25.2	27.2	33.7	29.1	26.1	25.0
Oregon	50.4	78.9	90.6	113.2	107.0	90.3	79.8
Washington	33.6	105.1	115.5	128.3	122.0	109.0	95.5

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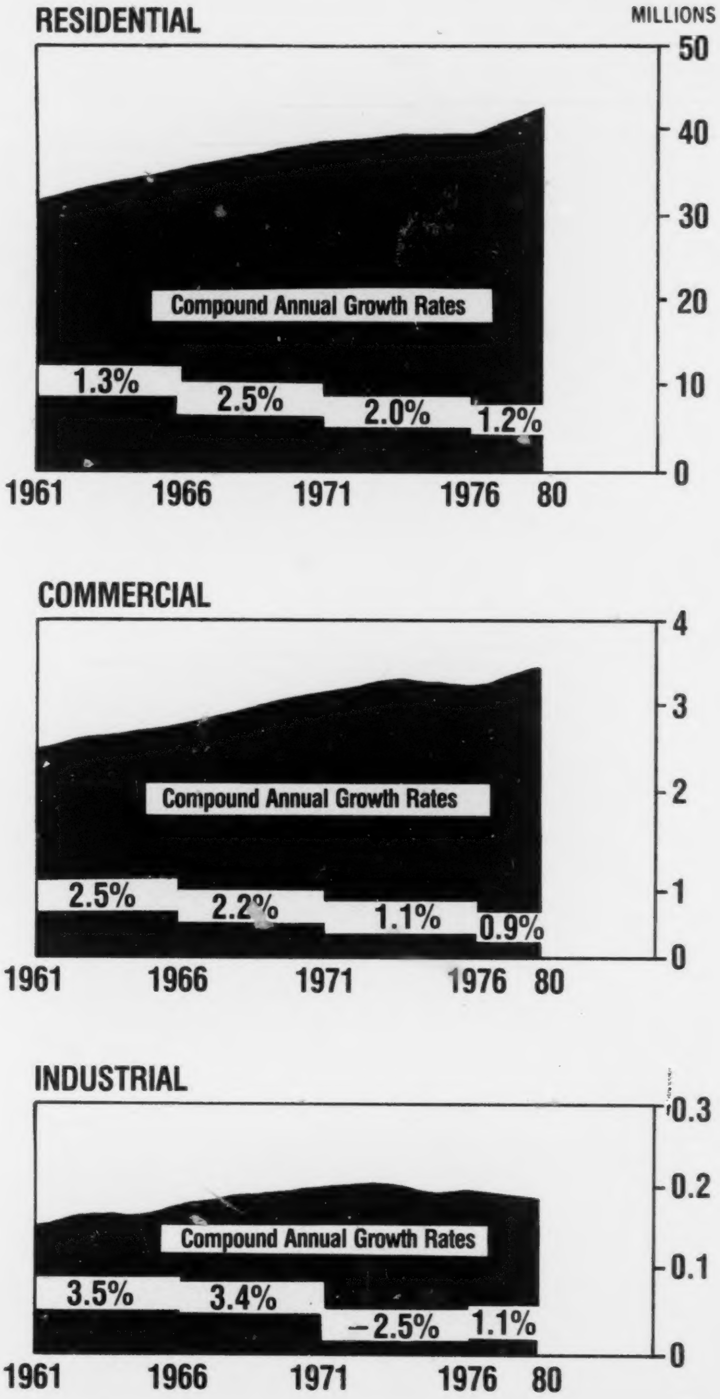
a. Customer data is based on yearly averages.
b. Not available.

SECTION VII
CUSTOMERS

	Average Customers	
	1980	% Change 80/79
Gas Utility Industry (Thousands)		
Total	47,037.8	+1.2
Residential	43,311.2	+1.1
Commercial	3,491.0	+2.0
Industrial	187.8	−0.8
Other	47.8	+6.7

CHART 12

GAS UTILITY INDUSTRY CUSTOMERS



REFERENCE: TABLE 59

CUSTOMERS

TABLE 59

GAS UTILITY INDUSTRY CUSTOMERS, BY CLASS OF SERVICE, YEARLY AVERAGES, 1955-1980[a]

(Thousands)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1955	28,478.8	26,282.6	2,047.5	121.2	27.5
1956	29,536.6	27,241.0	2,140.3	125.8	29.5
1957	30,476.0	28,101.2	2,211.1	132.0	31.7
1958	31,242.1	28,786.5	2,286.6	134.2	34.8
1959	32,065.9	29,529.6	2,363.9	136.3	36.1
1960	33,053.8	30,417.5	2,458.3	140.6	37.4
1961	33,830.5	31,118.2	2,528.9	146.7	36.7
1962	34,683.4	31,893.0	2,597.9	155.9	36.6
1963	35,551.0	32,710.8	2,639.6	161.7	38.9
1964	36,463.3	33,551.2	2,712.2	159.4	40.5
1965	37,337.5	34,340.8	2,789.7	166.2	40.8
1966	38,228.4	35,141.8	2,868.2	173.9	44.5
1967	39,076.5	35,915.1	2,933.6	181.2	46.6
1968	39,930.0	36,691.1	3,003.6	188.1	47.2
1969	40,854.0	37,538.3	3,073.8	192.7	49.2
1970	41,482.1	38,097.0	3,130.9	199.1	55.1
1971	42,241.9	38,788.7	3,199.0	204.7	49.5
1972	42,954.9	39,428.0	3,263.6	209.2	54.1
1973	43,711.2	40,115.5	3,331.4	209.1	55.2
1974	44,267.2	40,626.7	3,392.0	193.8	54.7
1975	44,554.5	40,950.3	3,366.9	183.5	53.8
1976	44,941.4	41,337.6	3,371.5	179.7	52.6
1977	45,274.0	41,682.4	3,371.0	173.3	47.3
1978	45,788.9	42,183.2	3,369.8[c]	189.2[c]	46.7
1979	46,478.3	42,821.3	3,422.8	189.4	44.8
1980	47,037.8	43,311.2	3,491.0	187.8	47.8

a. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.

b. Prior to 1976, "Other" electric generation customers included in the "Other" class of service. For 1976 and beyond all electric generation customers included in the Industrial category.

c. Reclassification of customers.

TABLE 60

GAS UTILITY INDUSTRY CUSTOMERS, BY STATE AND CLASS OF SERVICE, AVERAGES, 1980

(Thousands)

Division and State	Total	Class of Service Residential	Commercial	Industrial	Other
United States	**47,037.8**	**43,311.2**	**3,491.0**	**187.8**	**47.8**
New England	**1,732.6**	**1,596.7**	**123.2**	**9.0**	**3.7**
Connecticut	406.1	371.2	32.5	2.4	0.1
Maine	15.0	12.8	2.1	a	0.0
Massachusetts	1,079.3	1,000.3	71.0	5.0	3.1
New Hampshire	48.9	43.0	5.6	0.2	0.1
Rhode Island	167.8	155.7	10.6	1.5	0.0
Vermont	15.4	13.6	1.3	a	0.5
Middle Atlantic	**7,997.3**	**7,418.3**	**543.6**	**24.5**	**10.9**
New Jersey	1,849.1	1,670.1	173.0	6.0	a
New York	3,813.0	3,565.0	227.5	12.0	8.4
Pennsylvania	2,335.2	2,183.2	143.1	6.5	2.4
East North Central	**10,777.9**	**9,948.2**	**778.4**	**47.7**	**3.6**
Illinois	3,300.9	3,042.0	238.8	19.4	0.6
Indiana	1,244.5	1,138.8	100.7	4.5	0.5
Michigan	2,443.3	2,270.2	163.5	9.6	a
Ohio	2,746.5	2,546.0	191.9	6.2	2.4
Wisconsin	1,042.7	951.3	83.4	8.0	0.1
West North Central	**4,127.9**	**3,728.5**	**382.7**	**14.7**	**2.1**
Iowa	745.4	664.5	78.6	1.9	0.3
Kansas	724.3	652.5	66.7	4.8	0.3
Minnesota	809.4	736.3	68.0	4.6	0.5
Missouri	1,218.4	1,125.1	91.7	0.8	0.8
Nebraska	442.4	383.8	56.6	1.9	0.2
North Dakota	85.7	75.6	10.0	0.1	0.0
South Dakota	102.4	90.6	11.2	0.6	a
South Atlantic	**4,031.6**	**3,695.4**	**316.4**	**13.4**	**6.5**
Delaware	81.5	76.6	4.7	0.2	0.1
District of Columbia	148.6	133.1	15.5	0.0	0.0
Florida	432.5	399.8	31.3	0.5	1.0
Georgia	1,029.6	951.2	75.3	2.2	0.9
Maryland	773.5	719.8	49.0	4.6	0.1
North Carolina	366.7	323.3	40.6	2.0	0.8
South Carolina	282.3	252.8	25.3	1.2	3.0
Virginia	523.2	477.6	42.6	2.3	0.6
West Virginia	393.6	361.1	32.1	0.4	a
East South Central	**2,213.0**	**1,996.1**	**199.9**	**6.7**	**10.3**
Alabama	679.0	625.3	49.6	2.0	2.1
Kentucky	626.5	569.9	54.1	1.2	1.4
Mississippi	397.4	356.8	37.4	1.2	2.0
Tennessee	510.1	444.2	58.7	2.3	4.8
West South Central	**5,508.3**	**5,020.0**	**455.2**	**26.0**	**7.1**
Arkansas	480.5	425.1	53.4	1.9	0.1
Louisiana	1,002.3	931.6	67.0	2.4	1.2
Oklahoma	824.4	746.1	74.4	3.6	0.2
Texas	3,201.2	2,917.2	260.5	18.1	5.5
Mountain	**2,638.4**	**2,394.6**	**231.7**	**8.8**	**3.3**
Arizona	574.5	529.3	42.5	2.2	0.5
Colorado	839.5	750.0	87.6	1.7	0.1
Idaho	108.6	93.6	14.8	0.2	0.0
Montana	182.7	162.5	19.7	0.5	a
Nevada	168.2	161.5	6.6	0.1	a
New Mexico	327.6	291.8	29.9	3.3	2.6
Utah	361.0	338.3	22.1	0.6	a
Wyoming	76.3	67.6	8.5	0.2	a
Pacific	**8,010.8**	**7,513.3**	**460.0**	**37.0**	**0.4**
Alaska	42.1	36.7	4.7	0.6	0.0
California	7,286.3	6,878.1	375.0	32.8	0.4
Hawaii	33.2	29.2	2.4	1.7	0.0
Oregon	275.3	241.1	33.5	0.6	0.0
Washington	373.9	328.2	44.4	1.3	a

a. Less than .05.

CUSTOMERS

TABLE 61

GAS UTILITY INDUSTRY AVERAGE CUSTOMERS, BY STATE, 1955-1980[a]

(Thousands)

Division and State	1955	1960	1965	1970	1975	1979	1980
United States	**28,478.8**	**33,053.8**	**37,337.5**	**41,482.1**	**44,554.8**	**46.178.3**	**47,037.8**
New England	**1,616.5**	**1,622.6**	**1,641.6**	**1,692.3**	**1,692.5**	**1,700.0**	**1,732.6**
Connecticut	372.1	376.7	378.8	393.7	392.5	394.6	406.1
Maine	38.7	33.4	28.5	23.4	18.1	14.7	15.0
Massachusetts	988.3	1,002.3	1,024.7	1,055.3	1,055.4	1,059.8	1,079.3
New Hampshire	36.2	37.4	40.2	44.1	45.4	52.5	48.9
Rhode Island	159.9	155.9	154.5	161.4	164.6	163.8	167.8
Vermont	21.3	16.9	14.9	14.4	16.6	14.7	15.4
Middle Atlantic	**7,180.5**	**7,607.6**	**7,919.6**	**8,192.1**	**8,230.3**	**8,080.2**	**7,997.3**
New Jersey	1,360.7	1,504.9	1,640.6	1,763.1	1,815.1	1,842.7	1,849.1
New York	3,776.3	3,953.5	4,076.4	4,125.6	4,102.5	3,924.1	3,813.0
Pennsylvania	2,043.5	2,149.2	2,202.5	2,303.4	2,312.7	2,313.4	2,335.2
East North Central	**6,322.8**	**7,318.9**	**8,400.3**	**9,508.7**	**10,253.1**	**10,597.8**	**10,777.9**
Illinois	1,966.7	2,279.4	2,634.6	2,938.4	3,134.2	3,265.5	3,300.9
Indiana	674.6	780.0	933.8	1,084.4	1,187.7	1,224.8	1,244.5
Michigan	1,298.7	1,502.1	1,732.9	2,018.5	2,234.5	2,373.7	2,443.3
Ohio	1,908.6	2,208.4	2,424.2	2,644.5	2,757.8	2,724.1	2,746.5
Wisconsin	474.2	549.0	674.8	822.9	939.0	1,009.7	1,042.7
West North Central	**2,281.3**	**2,655.5**	**3,074.7**	**3,499.9**	**3,820.4**	**4,063.1**	**4,127.9**
Iowa	364.7	440.4	541.9	642.1	691.6	742.7	745.4
Kansas	477.8	532.8	586.5	643.1	669.8	712.8	724.3
Minnesota	408.4	476.1	560.9	640.9	726.8	782.9	809.4
Missouri	706.1	816.8	933.4	1,068.2	1,167.1	1,208.9	1,218.4
Nebraska	244.9	288.4	330.2	367.7	400.5	433.9	442.4
North Dakota	31.4	39.4	47.4	55.2	71.3	82.4	85.7
South Dakota	48.0	61.6	74.4	82.6	93.1	99.7	102.4
South Atlantic	**2,011.0**	**2,507.3**	**2,995.6**	**3,528.9**	**3,861.9**	**3,979.7**	**4,031.6**
Delaware	56.0	64.2	73.3	81.4	82.8	80.2	81.5
District of Columbia	181.9	177.3	172.4	162.8	155.4	149.1	148.6
Florida	184.2	244.1	294.2	370.1	391.8	427.7	432.5
Georgia	368.3	534.9	670.9	804.4	912.3	998.3	1,029.6
Maryland	477.0	558.7	639.6	712.5	774.6	767.8	773.5
North Carolina	75.2	121.6	193.2	285.2	338.0	356.4	366.7
South Carolina	47.9	87.0	154.7	233.3	283.1	288.4	282.3
Virginia	291.4	361.8	432.7	497.3	528.4	519.2	523.2
West Virginia	329.1	357.2	364.6	381.9	395.4	392.6	393.6
East South Central	**1,129.8**	**1,470.9**	**1,699.6**	**1,947.2**	**2,139.2**	**2,190.2**	**2,213.0**
Alabama	326.6	453.3	522.1	588.8	637.1	669.8	679.0
Kentucky	342.1	432.9	506.0	583.0	631.3	623.8	626.5
Mississippi	219.0	271.2	310.6	347.3	380.3	393.6	397.4
Tennessee	242.1	313.5	360.9	428.1	490.5	503.0	510.1
West South Central	**3,184.8**	**3,840.3**	**4,329.9**	**4,758.5**	**5,092.0**	**5,418.2**	**5,508.3**
Arkansas	236.3	299.1	362.1	419.3	461.4	480.1	480.5
Louisiana	551.3	701.2	804.7	871.3	935.9	974.4	1,002.3
Oklahoma	536.5	602.8	648.7	697.6	740.5	798.1	824.4
Texas	1,860.7	2,237.2	2,514.4	2,770.3	2,954.2	3,165.8	3,201.2
Mountain	**924.4**	**1,267.8**	**1,587.3**	**1,892.9**	**2,311.9**	**2,617.5**	**2,638.4**
Arizona	210.2	300.3	374.1	447.5	554.1	566.8	574.5
Colorado	296.8	388.4	485.7	586.5	688.8	810.7	839.5
Idaho	0.5	27.0	52.2	79.0	107.5	108.9	108.6
Montana	93.7	118.6	137.6	150.8	173.4	181.6	182.7
Nevada	14.5	24.6	47.8	72.4	112.2	155.2	168.2
New Mexico	136.5	176.6	203.8	231.8	278.9	317.5	327.6
Utah	116.3	166.5	211.9	243.8	297.4	361.0	361.0
Wyoming	55.9	65.8	74.2	81.1	99.5	115.8	76.3
Pacific	**3,827.7**	**4,762.9**	**5,688.9**	**6,461.6**	**7,153.5**	**7,831.7**	**8,010.8**
Alaska	b	b	6.1	17.4	29.1	39.5	42.1
California	3,673.5	4,506.6	5,311.1	5,919.4	6,495.1	7,128.8	7,286.3
Hawaii	b	39.8	36.2	36.1	34.8	33.3	33.2
Oregon	89.7	105.6	146.2	197.5	248.2	266.1	275.3
Washington	64.5	110.9	189.3	291.2	346.3	364.0	373.9

a. Excludes customers purchasing for resale.
b. Not available.

TABLE 62
GAS UTILITY INDUSTRY HOUSEHEATING CUSTOMERS AND HEATING SATURATIONS[a] BY CENSUS DIVISION, 1955-1980 YEARLY AVERAGES[b]

(Thousands)

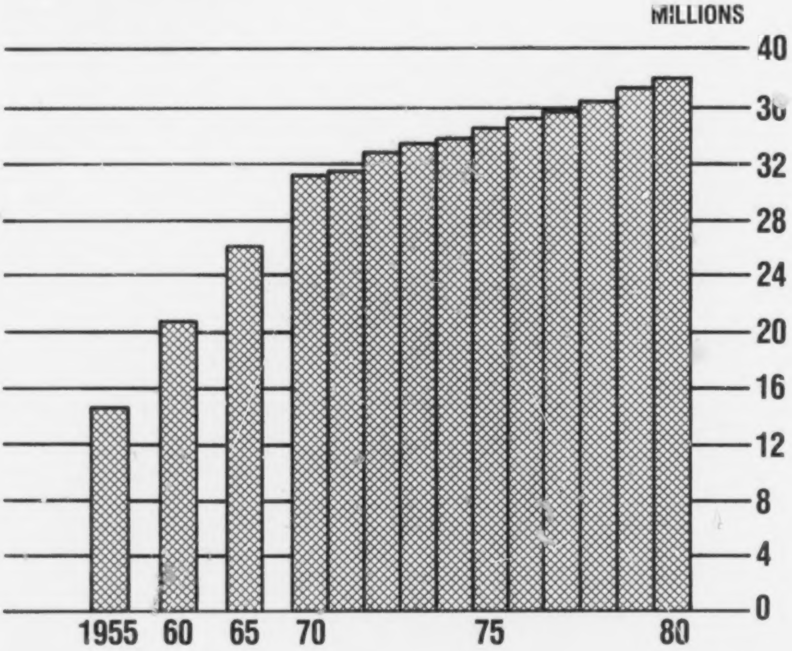
Census Division	1955		1960		1965		1970	
	Customers	Percent	Customers	Percent	Customers	Percent	Customers	Percent
United States	**14,711**	**56.0**	**20,739**	**68.2**	**26,297**	**76.1**	**31,209**	**81.9**
New England	146	9.6	386	25.3	583	36.8	779	48.6
Middle Atlantic	1,665	25.0	2,475	35.1	3,212	43.2	3,827	50.3
East North Central	2,694	45.6	4,369	64.3	6,091	77.6	7,528	85.6
West North Central	1,454	69.7	1,999	82.6	2,485	88.6	2,916	92.2
South Atlantic	1,042	56.4	1,533	66.7	2,073	74.9	2,599	80.9
East South Central	782	76.7	1,161	87.4	1,422	92.4	1,695	96.4
West South Central	2,849	99.2	3,457	99.7	3,900	99.5	4,278	99.0
Mountain	757	91.8	1,081	95.5	1,366	96.4	1,646	97.3
Pacific	3,322	93.7	4,278	97.3	5,165	97.3	5,941	98.3

Census Division	1975		1978		1979		1980[c]	
	Customers	Percent	Customers	Percent	Customers	Percent	Customers	Percent
United States	**34,372**	**84.1**	**36,241**	**85.9**	**37,212**	**86.8**	**38,063**	**87.9**
New England	857	54.8	871	56.0	947	60.2	1,013	63.5
Middle Atlantic	4,128	54.1	4,251	56.8	4,299	57.3	4,447	60.0
East North Central	8,432	89.4	8,740	90.5	8,944	91.3	9,194	92.4
West North Central	3,261	94.5	3,456	95.7	3,546	96.3	3,594	96.4
South Atlantic	2,970	84.2	3,131	86.8	3,230	88.6	3,302	89.4
East South Central	1,868	96.5	1,917	97.4	1,947	98.3	1,967	98.5
West South Central	4,496	97.1	4,730	97.5	4,894	99.0	4,996	99.5
Mountain	2,040	98.0	2,247	97.9	2,345	98.8	2,351	98.2
Pacific	6,320	94.6	6,898	95.8	7,060	95.6	7,199	95.8

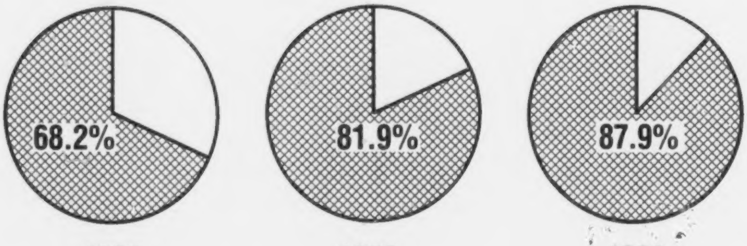
a. Percentages refer to proportion of total residential customers, within specified areas, using gas for heating.
b. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.
c. Preliminary.
Source: *A.G.A. Gas Househeating Survey*, Data represent average number of customers developed from number of year-end customers as shown in survey.

CHART 13

GAS UTILITY HOUSEHEATING CUSTOMERS



PERCENT OF RESIDENTIAL CUSTOMERS USING GAS FOR HOUSEHEATING



REFERENCE: TABLE 62

TABLE 63
GAS UTILITY INDUSTRY HOUSEHEATING CUSTOMERS, BY STATE
YEARLY AVERAGES FOR 1965-1980

	1965	1970	1975	1979	1980^P	
Division and State					Number	Saturation*
United States	**26,296.0**	**31,208.7**	**34,371.4**	**37,211.2**	**38,062.9**	**87.9**
New England	**582.9**	**778.8**	**857.1**	**946.5**	**1,013.2**	**63.5**
Connecticut	137.8	181.0	195.8	207.9	217.0	58.5
Maine	5.0	5.7	4.8	3.8	6.6	[illegible]
Massachusetts	354.5	443.3	531.5	589.6	641.7	64.1
New Hampshire	19.9	24.2	28.0	37.2	34.3	79.7
Rhode Island	65.4	116.0	86.3	95.5	102.4	65.7
Vermont	0.3	8.6	10.7	12.5	11.2	82.2
Middle Atlantic	**3,212.4**	**3,827.2**	**4,127.7**	**4,298.8**	**4,447.3**	**60.0**
New Jersey	550.8	713.7	793.4	882.0	942.8	56.4
New York	1,328.5	1,536.7	1,686.2	1,707.1	1,730.7	48.5
Pennsylvania	1,333.1	1,576.8	1,648.1	1,709.7	1,773.8	81.2
East North Central	**6,090.6**	**7,527.9**	**8,432.0**	**8,943.8**	**9,193.9**	**92.4**
Illinois	1,671.0	2,107.4	2,390.9	2,545.5	2,613.1	85.9
Indiana	588.9	813.0	947.6	1,017.0	1,068.2	93.8
Michigan	1,310.6	1,647.3	1,901.2	2,093.8	2,173.1	95.7
Ohio	2,108.5	2,379.2	2,482.0	2,487.5	2,508.7	98.5
Wisconsin	411.6	581.0	710.3	800.0	830.8	87.3
West North Central	**2,485.0**	**2,915.5**	**3,260.7**	**3,546.4**	**3,593.7**	**96.4**
Iowa	419.7	515.8	572.9	639.3	636.4	95.8
Kansas	513.0	563.4	595.4	647.4	650.5	99.7
Minnesota	430.6	513.1	598.3	660.7	690.9	93.8
Missouri	762.4	915.6	1,022.8	1,079.0	1,082.4	96.2
Nebraska	266.7	298.4	336.2	367.3	375.0	97.7
North Dakota	33.0	41.8	56.5	67.6	70.5	93.2
South Dakota	59.6	67.4	78.6	85.1	88.0	97.1
South Atlantic	**2,072.6**	**2,599.2**	**2,969.9**	**3,230.0**	**3,302.0**	**89.4**
Delaware	31.5	42.5	46.6	46.4	52.0	67.8
District of Columbia	80.1	83.2	86.1	89.0	92.0	69.1
Florida	182.0	247.9	261.7	360.7	368.4	92.1
Georgia	595.0	718.9	810.7	911.5	949.5	99.8
Maryland	357.0	443.3	528.8	540.8	549.8	76.4
North Carolina	138.8	209.6	274.4	282.1	288.1	89.1
South Carolina	106.8	179.7	226.9	253.0	243.7	96.4
Virginia	265.5	339.0	378.3	389.7	402.3	84.2
West Virginia	315.9	335.1	356.4	356.8	356.2	98.7
East South Central	**1,421.7**	**1,695.1**	**1,868.0**	**1,947.3**	**1,967.2**	**98.5**
Alabama	449.4	539.2	579.9	616.1	625.3	100.0
Kentucky	402.5	490.1	538.0	560.5	562.4	98.7
Mississippi	272.8	311.0	341.8	353.4	356.8	100.0
Tennessee	297.0	354.8	408.3	417.3	422.7	95.1
West South Central	**3,899.5**	**4,278.3**	**4,496.0**	**4,893.6**	**4,995.9**	**99.5**
Arkansas	316.5	371.0	405.8	424.5	425.1	100.0
Louisiana	739.3	737.3	859.3	902.9	930.6	99.9
Oklahoma	583.9	628.3	665.7	720.1	739.6	99.1
Texas	2,259.8	2,541.7	2,565.2	2,846.1	2,900.6	99.4
Mountain	**1,366.3**	**1,646.2**	**2,040.4**	**2,345.0**	**2,351.2**	**98.2**
Arizona	320.3	390.0	492.4	507.7	504.7	95.4
Colorado	418.2	508.7	610.9	724.1	750.0	100.0
Idaho	39.5	65.9	91.4	83.3	82.2	87.8
Montana	115.2	126.9	147.1	161.5	161.8	99.5
Nevada	43.5	65.9	100.7	147.2	155.3	96.2
New Mexico	179.6	203.4	239.4	280.7	291.4	99.9
Utah	187.2	217.6	272.6	338.3	338.3	100.0
Wyoming	62.8	67.8	85.9	102.2	67.5	99.8
Pacific	**5,165.0**	**5,940.5**	**6,319.6**	**7,059.8**	**7,198.5**	**95.8**
Alaska	4.9	14.4	24.0	34.2	36.2	98.6
California	4,906.1	5,506.9	5,794.5	6,497.0	6,616.2	96.2
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	106.2	166.3	206.7	218.0	224.8	93.2
Washington	147.9	252.9	294.4	310.6	321.3	97.9

*Percentages refer to proportion of residential gas customers using gas for heating.

P – Preliminary.

Source: *A.G.A. Gas Househeating Survey.* Data represent average number of customers developed from number of year-end customers as shown in survey.

CUSTOMERS

TABLE 64
GAS UTILITY INDUSTRY AVERAGE CUSTOMERS, BY QUARTERS, 1955-1980

(Thousands)

Year and Quarter	Total	Residential	Commercial	Industrial*	Other*
1955					
First	27,969	25,768	2,055	119	27
Second	27,954	25,818	1,988	121	27
Third	28,084	25,979	1,957	121	27
Fourth	28,946	26,691	2,105	123	27
1960					
First	32,882	30,220	2,486	139	37
Second	32,685	30,098	2,409	141	37
Third	32,638	30,099	2,363	140	36
Fourth	33,508	30,802	2,524	141	41
1965					
First	37,174	34,156	2,814	163	41
Second	36,963	34,014	2,743	165	41
Third	36,932	34,021	2,704	167	40
Fourth	37,967	34,886	2,870	169	42
1970					
First	41,491	38,063	3,175	199	54
Second	41,419	38,058	3,109	199	53
Third	41,080	37,773	3,054	198	55
Fourth	41,939	38,494	3,186	201	58
1972					
First	43,072	39,489	3,302	213	67
Second	42,687	39,204	3,228	211	45
Third	42,740	39,292	3,196	198	55
Fourth	43,320	39,727	3,329	215	48
1973					
First	43,789	40,135	3,372	208	72
Second	43,422	39,865	3,298	213	45
Third	43,432	39,910	3,268	201	53
Fourth	44,201	40,551	3,387	215	46
1974					
First	44,390	40,713	3,430	194	53
Second	43,978	40,371	3,360	194	53
Third	44,011	40,433	3,331	192	55
Fourth	44,690	40,990	3,446	196	58
1975					
First	44,762	41,099	3,406	194	63
Second	44,386	40,806	3,348	181	51
Third	44,233	40,686	3,322	177	48
Fourth	44,839	41,210	3,393	182	54
1976					
First	45,088	41,437	3,417	181	53
Second	44,924	41,311	3,380	180	53
Third	44,628	41,084	3,313	179	52
Fourth	45,128	41,519	3,377	179	53
1977					
First	45,689	42,005	3,454	175	55
Second	45,047	41,476	3,347	173	51
Third	44,633	41,140	3,282	170	41
Fourth	45,725	42,108	3,400	175	42
1978					
First	45,931	42,285	3,410	190	47
Second	45,761	42,149	3,376	190	47
Third	45,468	41,918	3,316	188	46
Fourth	45,996	42,382	3,378	189	47
1979					
First	46,553	42,869	3,449	190	45
Second	46,410	42,754	3,422	190	45
Third	46,242	42,635	3,375	189	44
Fourth	46,708	43,027	3,446	189	45
1980					
First	47,178	43,398	3,543	189	48
Second	47,012	43,274	3,502	188	48
Third	46,699	43,044	3,421	187	47
Fourth	47,263	43,528	3,499	188	48

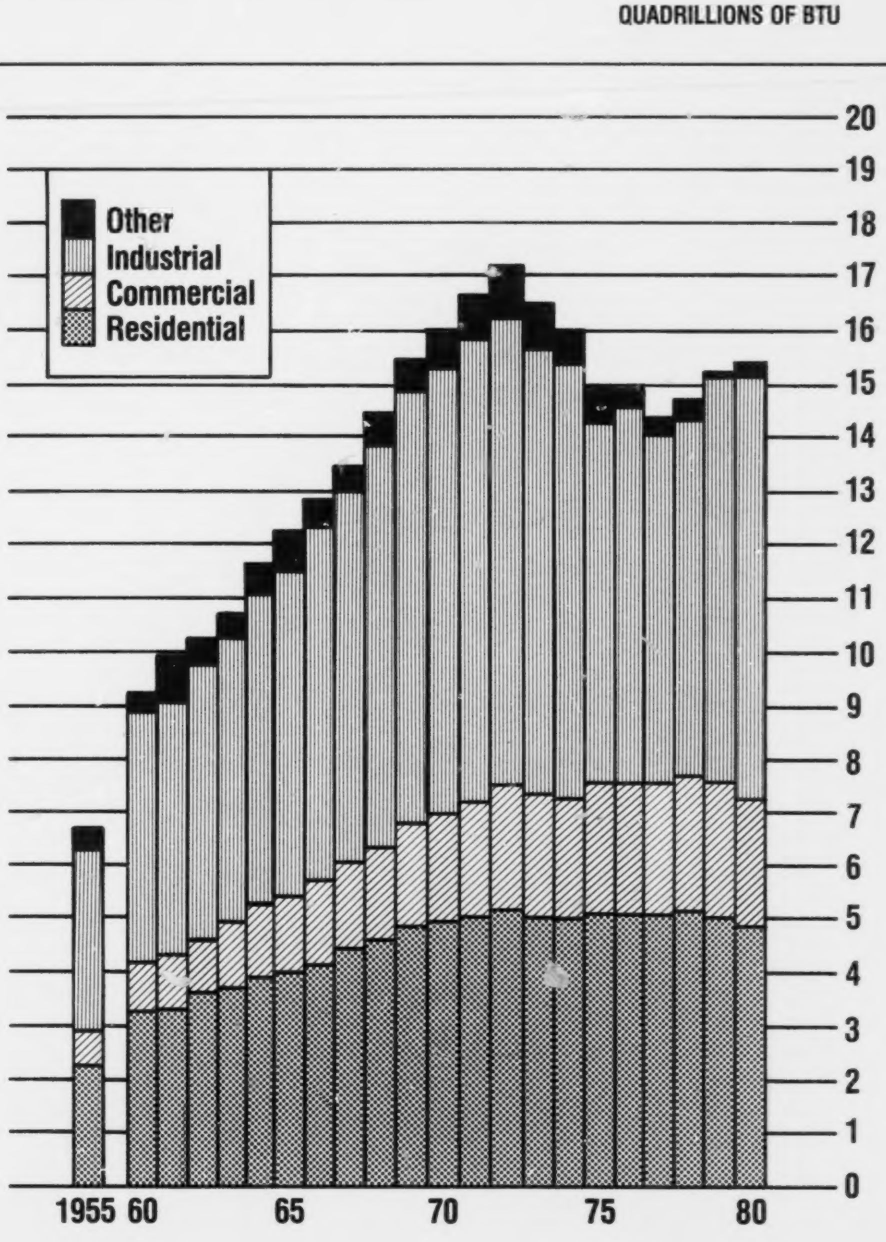
*Prior to 1976, "Other" electric generation customers included in the "Other" class of service. For 1976 and beyond all electric generation customers included in the Industrial category.

SECTION VIII
SALES-QUANTITIES

	1980	% Change 80/79
Gas Utility Industry		
(Trillions of Btu)		
Total	15,409.4	− 0.2
Residential	4,823.0	− 5.1
Commercial	2,441.5	− 1.8
Industrial	7,862.0	+ 4.1
Other	282.9	−10.6
Resale	15,691.2	+ 1.2
Electric Generation	2,033.8	+30.5

CHART 14

GAS UTILITY INDUSTRY SALES BY CLASS OF SERVICE



REFERENCE: TABLE 65

SALES – QUANTITIES

TABLE 65
GAS UTILITY INDUSTRY SALES, BY CLASS OF SERVICE, 1955-1980[a]

(Trillions of Btu)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1955	6,658.6	2,238.7	602.9	3,535.1	281.9
1956	7,254.2	2,464.3	655.8	3,868.7	265.4
1957	7,703.5	2,598.5	698.9	4,047.6	358.5
1958	8,028.6	2,812.5	764.9	4,076.4	374.8
1959	8,791.8	2,973.9	827.5	4,563.1	427.3
1960	9,287.7	3,188.1	919.8	4,709.4	470.4
1961	9,589.0	3,321.0	988.1	4,785.6	494.3
1962	10,234.8	3,536.9	1,092.9	5,100.1	504.9
1963	10,766.3	3,668.0	1,136.6	5,438.1	523.6
1964	11,591.2	3,869.7	1,273.5	5,912.0	536.0
1965	11,980.3	3,999.0	1,344.8	6,146.5	490.0
1966	12,859.1	4,175.4	1,462.8	6,653.3	567.6
1967	13,488.3	4,365.3	1,577.6	7,014.3	531.1
1968	14,472.4	4,552.7	1,704.9	7,595.1	619.7
1969	15,391.6	4,820.4	1,878.1	8,135.8	557.3
1970	16,043.5	4,923.7	2,006.6	8,439.2	674.0
1971	16,685.7	5,040.1	2,155.5	8,645.5	844.7
1972	17,082.1	5,141.8	2,275.7	8,775.7	883.0
1973	16,479.9	4,993.6	2,280.8	8,370.8	834.7
1974	16,000.3	4,864.8	2,293.4	8,153.2	689.0
1975	14,862.9	4,991.0	2,386.8	6,837.1	648.0
1976	14,813.5	5,014.2	2,422.6	7,107.0	269.6
1977	14,340.9	4,946.3	2,409.4	6,710.7	274.6
1978	14,748.4	5,106.7	2,499.5	6,841.2	301.0
1979	15,440.3	5,083.1	2,485.8	7,555.0	316.4
1980	15,409.4	4,823.0	2,441.5	7,862.0	282.9

a. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.

b. Prior to 1976, "Other" electric generation (see Table 72) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

TABLE 66
GAS UTILITY INDUSTRY SALES, BY STATE AND CLASS OF SERVICE, 1980

(Trillions of Btu)

Division and State	Total	Class of Service Residential	Commercial	Industrial[a]	Other	Average Btu Value	Electric Generation Included[b]
United States	**15,409.4**	**4,823.0**	**2,441.5**	**7,862.0**	**282.9**	**1,023.0**	**2,033.8**
New England	**298.2**	**143.9**	**81.0**	**70.1**	**3.3**	**1,015.9**	**7.1**
Connecticut	73.5	32.7	20.0	20.8	0.1	1,027.4	0.0
Maine	2.2	0.6	0.9	0.7	0.0	1,000.0	0.0
Massachusetts	182.5	91.4	51.6	36.7	2.9	1,014.2	5.4
New Hampshire	9.6	4.3	3.2	1.9	0.1	1,009.1	0.0
Rhode Island	26.3	13.5	4.4	8.4	0.0	1,001.6	1.7
Vermont	4.1	1.4	0.9	1.6	0.3	990.0	0.0
Middle Atlantic	**1,646.8**	**776.6**	**288.7**	**548.4**	**33.0**	**1,024.2**	**20[illegible]**
New Jersey	317.6	149.9	69.7	97.5	0.5	1,035.6	18.3
New York	600.8	333.3	108.8	136.4	22.3	1,018.4	0.1
Pennsylvania	728.4	293.4	110.2	314.5	10.2	1,023.8	1.7
East North Central	**3,658.1**	**1,578.0**	**714.5**	**1,353.2**	**12.3**	**1,016.3**	**50.6**
Illinois	1,099.7	494.3	230.6	374.3	0.4	1,023.2	16.6
Indiana	476.5	163.7	67.8	243.1	1.8	987.3	0.1
Michigan	850.0	392.4	191.4	266.0	0.2	1,015.4	19.8
Ohio	888.0	403.1	163.4	312.3	9.2	1,023.7	0.4
Wisconsin	343.9	124.5	51.4	157.5	0.6	1,008.4	13.6
West North Central	**1,412.5**	**489.3**	**300.3**	**607.5**	**15.4**	**991.9**	**103.0**
Iowa	255.8	84.8	51.4	118.8	0.7	1,004.7	3.4
Kansas	364.8	82.6	48.6	227.9	5.7	982.0	49.9
Minnesota	267.1	102.3	55.2	102.8	6.9	997.9	33.9
Missouri	326.8	149.9	92.3	82.9	1.8	978.8	4.9
Nebraska	152.5	49.5	35.1	67.8	0.1	997.0	10.9
North Dakota	21.6	9.6	10.5	1.4	0.1	1,000.0	c
South Dakota	23.9	10.6	7.3	5.9	0.1	999.4	0.0
South Atlantic	**1,278.0**	**346.1**	**229.2**	**668.3**	**34.4**	**1,028.5**	**98.0**
Delaware	22.7	7.2	3.7	11.0	0.8	1,036.0	4.4
Dist. of Columbia	27.6	13.8	13.8	0.0	0.0	1,016.0	0.0
Florida	233.0	18.0	32.8	178.7	3.5	1,045.7	88.3
Georgia	300.0	92.4	54.7	150.2	2.8	1,035.3	4.0
Maryland	154.6	69.5	28.9	56.1	0.1	1,024.8	0.0
North Carolina	143.2	31.4	22.6	88.1	1.2	1,023.3	0.8
South Carolina	133.0	18.9	15.4	74.4	24.3	1,008.0	0.5
Virginia	134.8	47.6	32.9	52.6	1.6	1,019.8	0.0
West Virginia	129.0	47.4	24.3	57.2	0.1	1,031.9	0.0
East South Central	**806.9**	**204.2**	**110.8**	**472.0**	**20.0**	**1,024.7**	**70.4**
Alabama	223.5	54.2	27.1	141.4	0.8	1,031.1	c
Kentucky	175.9	74.3	32.5	62.6	6.5	1,010.6	0.0
Mississippi	191.5	30.6	15.2	136.3	9.4	1,025.8	69.1
Tennessee	216.0	45.1	36.0	131.6	3.3	1,029.7	1.3
West South Central	**3,534.7**	**423.9**	**241.8**	**2,724.0**	**145.0**	**1,030.6**	**1,022.6**
Arkansas	205.8	40.7	26.1	137.8	1.3	1,000.0	2.4
Louisiana	515.4	71.9	27.7	402.0	13.8	1,051.3	147.1
Oklahoma	473.4	77.4	44.2	350.1	1.8	1,023.4	159.4
Texas	2,340.0	233.9	143.8	1,834.1	128.1	1,028.2	713.7
Mountain	**828.3**	**248.0**	**154.8**	**408.7**	**16.7**	**999.1**	**131.6**
Arizona	135.9	31.2	20.6	82.0	2.1	1,056.9	34.8
Colorado	239.0	89.8	65.1	83.0	1.1	889.5	30.2
Idaho	45.4	7.4	8.7	29.3	0.0	1,048.5	0.0
Montana	54.1	20.5	14.4	16.6	2.7	983.8	0.1
Nevada	62.1	14.1	10.5	37.1	0.3	1,048.5	29.2
New Mexico	124.5	28.9	15.5	69.6	10.4	1,056.7	37.3
Utah	121.7	47.0	14.3	60.3	c	1,050.0	0.0
Wyoming	45.7	9.1	5.7	30.8	0.1	931.5	0.0
Pacific	**1,945.9**	**613.0**	**320.4**	**1,009.7**	**2.8**	**1,049.9**	**530.4**
Alaska	32.3	8.0	3.4	20.9	0.0	1,000.0	16.7
California	1,700.0	553.7	268.4	875.5	2.4	1,049.9	513.4
Hawaii	3.5	0.7	0.9	1.8	0.0	949.0	0.0
Oregon	76.4	19.2	15.8	41.3	0.0	1,055.4	0.3
Washington	133.8	31.3	31.5	70.2	0.4	1,050.2	0.0

a. Includes Electric Generation.
b. Included in Industrial.
c. Less than 0.05 trillion Btu.

SALES – QUANTITIES

TABLE 67
GAS UTILITY INDUSTRY SALES, BY STATE, 1955-1980[a]

(Trillions of Btu)

Division and State	1955	1960	1965	1970	1975	1978	1979	1980
United States	**6,658.6**	**9,287.7**	**11,980.3**	**16,043.5**	**14,862.9**	**14,748.4**	**15,440.3**	**15,409.4**
New England	**65.4**	**120.5**	**172.0**	**236.7**	**243.5**	**268.8**	**285.6**	**298.2**
Connecticut	17.4	31.5	44.0	61.4	61.0	65.8	68.7	73.5
Maine	1.3	1.3	1.3	1.8	2.0	2.0	1.9	2.2
Massachusetts	39.7	72.4	105.0	139.5	145.9	164.7	173.3	182.5
New Hampshire	1.4	3.0	4.3	6.7	7.8	8.3	8.9	9.6
Rhode Island	5.2	11.9	16.9	25.2	23.4	23.9	28.0	26.3
Vermont	0.4	0.4	0.5	2.1	3.4	4.1	4.7	4.1
Middle Atlantic	**693.5**	**993.9**	**1,293.4**	**1,651.0**	**1,495.1**	**1,532.3**	**1,593.2**	**1,646.8**
New Jersey	68.9	125.9	194.1	294.9	257.9	264.5	288.1	317.6
New York	233.0	358.0	475.6	595.9	581.9	587.9	588.2	600.8
Pennsylvania	391.6	510.0	623.7	760.2	655.4	679.9	716.9	728.4
East North Central	**1,276.1**	**1,872.4**	**2,724.4**	**3,896.4**	**3,749.5**	**3,813.7**	**3,901.6**	**3,658.1**
Illinois	386.4	509.5	746.5	1,140.3	1,112.4	1,178.5	1,193.5	1,099.7
Indiana	121.1	203.9	344.6	505.0	458.8	448.7	492.3	476.5
Michigan	193.4	357.2	545.3	839.4	885.8	898.3	889.4	850.0
Ohio	533.4	712.5	891.0	1,084.9	929.8	938.3	960.5	888.0
Wisconsin	41.8	89.3	197.0	326.8	362.7	349.9	365.9	343.9
West North Central	**772.9**	**1,040.4**	**1,316.0**	**1,743.7**	**1,592.4**	**1,465.5**	**1,488.9**	**1,412.5**
Iowa	105.9	157.7	205.6	292.5	298.8	262.7	267.2	255.8
Kansas	245.0	305.6	350.4	459.5	410.4	383.1	383.2	364.8
Minnesota	110.6	160.4	230.9	324.3	295.0	260.7	276.7	267.1
Missouri	192.6	257.2	333.2	421.0	344.5	350.8	349.9	326.8
Nebraska	96.3	126.7	153.7	197.8	187.2	156.7	160.3	152.5
North Dakota	5.2	8.5	15.6	18.9	24.7	24.4	25.1	21.6
South Dakota	17.5	24.3	26.6	29.7	31.8	27.1	26.5	23.9
South Atlantic	**392.7**	**649.8**	**871.8**	**1,311.1**	**1,106.1**	**1,090.7**	**1,235.6**	**1,278.0**
Delaware	2.8	8.9	16.6	24.3	19.3	19.2	20.8	22.7
District of Columbia	[illegible]	18.5	21.8	27.1	24.8	26.6	25.8	27.6
Florida	30.6	91.1	144.2	218.7	127.4	168.1	223.0	233.0
Georgia	136.0	188.5	210.3	333.8	312.5	277.7	292.8	300.0
Maryland	40.3	65.9	96.8	145.1	138.8	143.4	152.7	154.6
North Carolina	11.5	41.6	73.9	151.2	104.8	84.9	122.5	143.2
South Carolina	13.2	40.6	73.9	120.1	118.3	113.9	132.0	133.0
Virginia	40.0	64.3	91.3	133.9	116.0	115.2	128.2	134.8
West Virginia	102.8	130.4	143.0	156.9	144.3	141.6	137.9	129.0
East South Central	**465.8**	**600.1**	**729.7**	**995.4**	**752.8**	**711.2**	**798.7**	**806.9**
Alabama	149.3	180.3	224.8	290.0	227.9	219.7	234.1	223.5
Kentucky	82.7	126.6	142.1	189.9	180.0	169.8	184.4	175.9
Mississippi	118.2	146.2	177.1	265.6	141.3	133.2	162.9	191.5
Tennessee	115.6	147.0	185.7	249.9	203.5	188.5	217.2	216.0
West South Central	**1,758.2**	**2,216.5**	**2,408.5**	**3,031.0**	**2,973.6**	**3,232.8**	**3,220.4**	**3,534.7**
Arkansas	166.3	177.3	228.6	339.9	219.4	197.2	207.6	205.8
Louisiana	414.4	536.8	592.0	742.1	457.3	512.9	562.6	515.4
Oklahoma	187.5	248.8	255.0	275.6	417.9	506.9	490.7	473.4
Texas	990.0	1,253.6	1,332.9	1,673.4	1,878.9	2,015.8	1,959.5	2,340.0
Mountain	**394.6**	**576.4**	**703.8**	**926.1**	**928.6**	**885.5**	**907.5**	**828.3**
Arizona	78.5	110.9	127.3	168.1	144.4	155.9	147.0	135.9
Colorado	125.0	160.0	196.5	253.6	269.2	252.2	254.5	239.0
Idaho	0.0	22.0	34.8	43.1	51.2	47.0	50.4	45.4
Montana	43.5	51.3	67.4	78.8	79.8	65.1	64.8	54.1
Nevada	3.2	14.2	29.7	56.0	61.3	54.3	75.3	62.1
New Mexico	66.9	112.9	106.2	135.6	142.5	136.9	134.7	124.5
Utah	52.3	73.1	101.8	119.1	119.4	118.4	123.8	121.7
Wyoming	25.2	32.0	40.1	71.8	60.8	55.7	57.0	45.7
Pacific	**839.4**	**1,217.7**	**1,760.7**	**2,252.1**	**2,021.3**	**1,748.1**	**2,008.8**	**1,945.9**
Alaska	b	b	5.2	16.6	30.7	27.4	30.3	32.3
California	830.2	1,115.4	1,580.1	1,986.8	1,735.6	1,487.7	1,728.8	1,700.0
Hawaii	b	1.6	2.0	2.8	3.6	3.3	3.5	3.5
Oregon	5.8	32.0	59.0	88.1	86.8	88.6	92.4	76.4
Washington	3.4	68.7	114.4	157.8	164.6	140.9	153.7	133.8

a. Excludes sales for resale.
b. Not available.

TABLE 68
GAS UTILITY INDUSTRY SALES, BY CLASS OF SERVICE AND TYPE OF COMPANY
1975-1980*

(Trillions of Btu)

	1975	1976	1977	1978	1979	1980
Distribution						
Total	4,025	4,156	3,851	4,026	4,151	3,982
Residential	1,769	1,825	1,782	1,873	1,797	1,719
Commercial	825	854	830	880	899	900
Industrial	1,391	1,442	1,220	1,246	1,424	1,333
Other	40	35	19	28	31	30
Transmission						
Total	1,496	1,883	1,934	2,016	2,059	2,612
Residential	2	2	2	2	2	2
Commerical	7	6	5	4	4	8
Industrial	1,235	1,762	1,808	1,888	1,949	2,495
Other	252	113	119	122	105	108
Integrated						
Total	4,775	4,257	4,303	4,411	4,724	4,427
Residential	1,390	1,358	1,390	1,428	1,458	1,354
Commercial	696	708	694	704	698	645
Industrial	2,626	2,147	2,149	2,209	2,455	2,356
Other	63	44	69	70	113	72
Combination						
Total	3,878	3,860	3,623	3,631	3,807	3,705
Residential	1,526	1,527	1,470	1,485	1,519	1,453
Commercial	731	727	753	781	756	763
Industrial	1,355	1,553	1,357	1,311	1,491	1,444
Other	266	53	42	54	42	45
Municipals						
Total	689	659	630	664	701	683
Residential	304	302	301	319	308	295
Commerical	127	127	128	131	129	125
Industrial	231	204	176	187	236	235
Other	27	25	25	27	28	28

*Prior to 1976 "Other" electric generation is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

SALES – QUANTITIES

TABLE 69
GAS UTILITY INDUSTRY SALES OF GAS FOR RESALE, BY STATE
1955-1980

(Trillions of Btu)

Division and State	1955*	1960*	1965*	1970	1975	1979	1980
United States	**6,122.6**	**9,257.8**	**12,566.4**	**17,575.6**	**14,504.5**	**15,512.2**	**15,691.2**
New England	72.5	135.5	194.0	**276.0**	**271.5**	**294.5**	**299.8**
Connecticut				83.0	82.7	90.9	76.4
Maine				0.0	0.0	0.0	0.0
Massachusetts				156.6	160.0	171.7	188.8
New Hampshire				8.6	5.8	5.8	6.8
Rhode Island				27.8	21.8	26.1	27.9
Vermont				0.0	1.3	0.0	0.0
Middle Atlantic	816.3	1,337.4	1,827.4	**2,433.3**	**1,901.6**	**2,116.4**	**2,331.7**
New Jersey				491.9	370.2	421.8	510.6
New York				802.5	572.2	628.4	707.5
Pennsylvania				1,138.9	959.2	1,066.2	1,113.5
East North Central	1,403.5	1,999.8	3,296.3	**5,249.0**	**4,542.8**	**4,705.8**	**4,442.0**
Illinois				1,688.6	1,537.1	1,624.5	1,613.3
Indiana				513.6	406.8	481.2	461.4
Michigan				698.5	759.4	699.7	615.8
Ohio				1,892.4	1,356.1	1,420.0	1,315.3
Wisconsin				455.9	483.4	480.4	436.1
West North Central	574.7	759.7	975.2	**1,306.9**	**1,144.5**	**1,105.2**	**1,043.9**
Iowa				271.0	259.7	228.1	208.9
Kansas				206.4	169.7	165.0	149.4
Minnesota				272.6	239.0	246.7	239.1
Missouri				405.2	338.0	353.1	337.8
Nebraska				124.7	111.7	89.4	86.4
North Dakota				5.2	5.5	5.1	4.9
South Dakota				21.8	20.8	17.9	17.5
South Atlantic	774.3	1,223.6	1,605.2	**1,981.1**	**1,372.5**	**1,441.7**	**1,446.7**
Delaware				1.1	1.2	1.2	1.2
District of Columbia				0.0	0.0	0.0	0.0
Florida				63.4	82.7	93.4	94.7
Georgia				327.0	315.5	306.2	308.7
Maryland				183.1	151.0	190.1	184.5
North Carolina				157.9	118.5	128.9	165.8
South Carolina				166.5	127.6	126.4	111.6
Virginia				218.3	181.9	207.1	209.1
West Virginia				863.8	394.1	388.4	371.2
East South Central	757.0	1,009.5	1,116.2	**1,573.5**	**1,178.0**	**1,323.9**	**1,256.9**
Alabama				237.0	219.3	236.5	219.8
Kentucky				417.6	238.4	244.4	237.6
Mississippi				349.3	263.1	349.1	289.1
Tennessee				569.6	457.3	493.9	510.3
West South Central	836.4	1,199.7	1,136.4	**1,497.3**	**1,215.9**	**1,577.4**	**2,010.6**
Arkansas				22.6	16.1	16.5	17.0
Louisiana				854.6	569.2	636.1	661.9
Oklahoma				166.6	148.6	163.8	208.4
Texas				453.6	482.1	761.0	1,123.3
Mountain	755.3	1,304.2	1,562.0	**2,021.0**	**1,901.8**	**1,922.3**	**1,879.6**
Arizona				1,477.8	1,341.0	1,290.8	1,370.5
Colorado				249.0	279.6	359.9	261.8
Idaho				73.0	84.2	86.9	66.7
Montana				7.5	7.7	18.3	7.6
Nevada				5.8	9.5	9.7	9.9
New Mexico				104.9	71.8	55.3	58.6
Utah				21.3	7.4	11.5	12.0
Wyoming				81.6	100.6	89.8	92.5
Pacific	132.6	288.4	853.7	**1,237.6**	**975.9**	**1,024.9**	**980.1**
Alaska				0.0	0.0	0.0	27.4
California				680.5	346.5	388.0	436.5
Hawaii				0.0	0.0	0.0	0.0
Oregon				399.9	470.2	477.6	388.3
Washington				157.2	159.1	159.3	127.8

*Includes natural gas only prior to 1970 and state breakdowns not available prior to 1970.

TABLE 70
GAS UTILITY INDUSTRY FIRM AND INTERRUPTIBLE GAS SALES BY STATE, 1980

(Trillions of Btu)

	Commercial			Industrial		
Division and State	Total	Firm	Interruptible	Total	Firm	Interruptible
United States	**2,441.5**	**2,268.2**	**173.4**	**7,862.0**	**4,669.0**	**3,193.0**
New England	**81.0**	**72.0**	**9.0**	**70.1**	**37.9**	**32.2**
Connecticut	20.0	19.0	1.0	20.8	15.4	5.4
Maine	0.9	0.9	0.0	0.7	0.7	a
Massachusetts	51.6	43.7	7.9	36.7	17.7	19.0
New Hampshire	3.2	3.2	0.0	1.9	1.1	0.9
Rhode Island	4.4	4.3	0.1	8.4	2.9	5.5
Vermont	0.9	0.9	0.0	1.6	0.1	1.5
Middle Atlantic	**288.7**	**279.1**	**9.6**	**548.4**	**418.5**	**129.9**
New Jersey	69.7	62.6	7.1	97.5	46.6	50.9
New York	108.8	107.1	1.7	136.4	95.0	41.4
Pennsylvania	110.2	109.4	0.8	314.6	277.0	37.6
East North Central	**714.5**	**696.0**	**18.6**	**1,353.2**	**1,104.2**	**249.0**
Illinois	230.6	230.1	0.5	374.3	325.3	49.0
Indiana	67.8	64.0	3.8	243.1	211.3	31.8
Michigan	191.4	189.1	2.3	266.0	209.3	56.7
Ohio	163.4	162.1	1.3	312.3	291.5	20.7
Wisconsin	61.4	50.7	10.7	157.5	66.7	90.8
West North Central	**300.3**	**239.2**	**61.1**	**607.5**	**239.8**	**367.7**
Iowa	51.4	41.7	9.6	118.8	84.5	34.4
Kansas	48.6	32.8	15.8	227.9	58.1	169.8
Minnesota	55.2	44.5	10.7	102.8	35.4	67.5
Missouri	92.3	73.8	18.5	82.9	19.4	63.5
Nebraska	35.1	32.4	2.7	67.8	42.0	25.8
North Dakota	10.5	7.4	3.1	1.4	0.0	1.4
South Dakota	7.3	6.6	0.7	5.9	0.5	5.4
South Atlantic	**229.2**	**202.7**	**26.5**	**668.3**	**297.3**	**371.1**
Delaware	3.7	3.4	0.3	11.0	8.4	2.6
District of Columbia	13.8	10.8	3.0	0.0	0.0	0.0
Florida	32.8	26.6	6.2	178.7	27.1	151.6
Georgia	54.7	54.5	0.2	150.2	20.0	130.2
Maryland	28.9	22.4	6.5	56.1	24.2	31.9
North Carolina	22.6	22.6	a	88.1	78.5	9.5
South Carolina	15.4	11.2	4.3	74.4	44.0	30.4
Virginia	32.9	28.0	4.9	52.6	37.9	14.7
West Virginia	24.3	23.3	1.1	57.2	57.1	0.1
East South Central	**110.8**	**101.4**	**9.4**	**472.0**	**322.4**	**149.6**
Alabama	27.1	23.1	4.0	141.4	77.5	63.9
Kentucky	32.5	29.5	3.0	62.6	38.4	24.2
Mississippi	15.2	15.1	a	136.3	132.9	3.4
Tennessee	36.0	33.7	2.3	131.6	73.6	58.0
West South Central	**241.8**	**234.7**	**7.1**	**2,724.0**	**1,964.3**	**759.7**
Arkansas	26.1	25.8	0.3	137.8	124.8	13.0
Louisiana	27.7	27.7	a	402.0	320.6	81.4
Oklahoma	44.2	39.2	5.0	350.1	238.3	111.8
Texas	143.8	142.0	1.8	1,834.1	1,280.6	553.5
Mountain	**154.8**	**152.6**	**2.2**	**408.7**	**201.3**	**207.4**
Arizona	20.6	20.6	0.0	82.0	79.7	2.3
Colorado	65.1	64.8	0.4	83.0	18.8	64.2
Idaho	8.7	8.2	0.5	29.3	25.4	3.9
Montana	14.4	14.1	0.3	16.6	1.1	15.5
Nevada	10.5	10.5	0.0	37.1	37.1	0.0
New Mexico	15.5	14.5	1.1	69.6	17.8	51.8
Utah	14.3	14.3	0.0	60.3	14.7	45.6
Wyoming	5.7	5.6	a	30.8	6.7	24.2
Pacific	**320.4**	**290.5**	**29.9**	**1,009.7**	**83.3**	**926.4**
Alaska	3.4	3.4	0.0	20.9	4.2	16.7
California	268.4	247.5	20.9	875.5	23.7	851.8
Hawaii	0.9	0.9	0.0	1.8	1.8	0.0
Oregon	15.8	15.2	0.6	41.3	21.3	20.1
Washington	31.8	23.5	8.3	70.2	32.3	37.9

a. Less than 0.05 trillion Btu.

TABLE 71
GAS CONSUMED FOR ELECTRIC GENERATION,* BY STATE, 1955-1980

(Millions of Cubic Feet)

Division and State	1955	1960	1965	1970	1975	1979^R	1980
United States	**1,153,280**	**1,724,762**	**2,321,101**	**3,931,860**	**3,146,874**	**3,490,523**	**3,681,595**
New England	**9,495**	**12,885**	**13,918**	**8,133**	**2,523**	**9,202**	**7,001**
Connecticut	852	1,756	337	147	344	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	8,532	10,785	13,098	5,668	1,437	6,886	5,083
New Hampshire	0	0	0	0	177	30	0
Rhode Island	111	344	483	2,319	11	1,752	1,679
Vermont	0	0	0	0	555	534	239
Middle Atlantic	**42,821**	**89,288**	**97,850**	**161,385**	**23,426**	**108,553**	**206,769**
New Jersey	14,064	25,482	22,440	45,891	8,601	30,727	79,513
New York	25,497	57,819	74,189	106,141	13,613	75,964	124,391
Pennsylvania	3,260	5,987	1,221	9,354	1,213	1,862	2,865
East North Central	**66,881**	**61,407**	**68,232**	**278,143**	**118,394**	**98,998**	**65,883**
Illinois	55,525	42,348	34,618	132,382	34,176	31,547	19,165
Indiana	6,565	8,790	13,272	29,507	10,994	2,774	1,904
Michigan	332	5,209	2,989	64,270	47,151	37,860	26,368
Ohio	4,403	2,992	2,947	21,380	6,139	5,604	4,706
Wisconsin	56	2,068	14,406	30,604	19,935	21,213	13,740
West North Central	**178,975**	**245,684**	**303,818**	**420,086**	**264,825**	**166,664**	**143,387**
Iowa	40,317	48,587	52,238	77,910	46,929	8,333	6,835
Kansas	60,071	82,195	112,955	167,885	127,818	116,828	101,022
Minnesota	31,232	48,521	51,420	58,954	22,709	6,966	8,077
Missouri	22,679	30,251	47,552	62,970	26,320	20,383	15,329
Nebraska	21,046	30,973	36,269	47,641	37,659	14,009	11,850
North Dakota	216	103	25	362	157	17	15
South Dakota	3,414	4,454	3,359	4,364	3,232	129	259
South Atlantic	**62,076**	**147,439**	**117,395**	**343,408**	**199,105**	**194,824**	**191,409**
Delaware	1,666	3,190	4,611	3,744	1,697	5,143	6,999
District of Colmbia	0	0	0	0	0	0	0
Florida	7,935	88,518	87,001	198,367	141,153	167,444	166,047
Georgia	34,880	25,336	831	58,674	40,282	3,023	3,666
Maryland	79	78	56	11,435	451	9,820	5,230
North Carolina	0	4,660	2,895	21,126	101	591	1,702
South Carolina	15,487	23,278	18,801	45,081	14,566	5,177	5,418
Virginia	662	1,438	2,268	4,276	496	3,557	2,285
West Virginia	1,367	941	932	705	358	69	62
East South Central	**58,938**	**53,249**	**78,626**	**140,940**	**37,774**	**72,051**	**99,461**
Alabama	17,414	9,378	5,561	15,444	5,994	6,934	1,382
Kentucky	6,043	2,288	453	8,533	272	934	1,902
Mississippi	33,297	34,358	56,360	99,710	31,507	64,183	95,073
Tennessee	2,184	7,225	16,252	17,253	0	0	1,104
West South Central	**455,170**	**656,727**	**1,009,857**	**1,735,541**	**2,042,085**	**2,166,468**	**2,243,820**
Arkansas	46,297	46,779	67,510	107,445	31,818	30,254	58,863
Louisiana	70,813	119,818	175,573	331,750	356,130	401,399	424,991
Oklahoma	64,780	82,820	127,231	234,721	300,848	334,446	329,940
Texas	273,280	407,310	639,543	1,061,625	1,353,290	1,400,368	1,430,026
Mountain	**95,260**	**134,990**	**136,442**	**198,745**	**164,636**	**196,387**	**175,032**
Arizona	26,681	53,246	36,740	58,898	17,693	51,258	49,699
Colorado	35,550	37,015	35,539	51,194	52,930	35,409	31,928
Idaho	0	0	0	0	18	491	46
Montana	633	341	1,992	2,529	1,059	2,320	4,182
Nevada	0	6,339	13,271	25,336	25,152	39,828	27,541
New Mexico	21,663	33,701	43,996	54,894	64,239	60,410	56,280
Utah	9,757	3,677	4,742	3,520	2,725	6,186	5,133
Wyoming	975	671	163	2,373	819	486	222
Pacific	**183,664**	**323,693**	**494,963**	**645,478**	**294,105**	**477,376**	**548,833**
Alaska	0	0	2,149	8,198	19,619	28,295	28,763
California	183,664	322,992	492,701	636,270	274,483	444,601	518,808
Hawaii	0	0	0	0	0	0	0
Oregon	0	701	113	1,010	3	2,380	321
Washington	0	0	0	0	0	2,100	941

* Includes direct sales by producers to electric utilities as well as sales by the gas utility industry.
R – Revised.
Source: Energy Information Administration, Energy Data Report – *Power Production, Consumption and Capacity – Annual.*

TABLE 72
GAS UTILITY INDUSTRY GAS USED FOR ELECTRIC GENERATION, 1955-1980[a]

(Trillions of Btu)

	Sales					
	Industrial[b]					Total Sales and Transfers
Year	Firm	Interruptible	Other	Total Sales	Transfers[c]	
1955	739.3		132.4	871.7	191.2	1,062.8
1956	816.9		142.0	958.9	187.6	1,146.4
1957	854.0		134.4	988.4	200.3	1,188.7
1958	872.4		124.3	996.7	236.4	1,233.1
1959	937.3		161.4	1,098.7	222.7	1,321.4
1960	999.3		187.1	1,186.4	234.1	1,420.4
1961	990.6		218.6	1,209.2	244.0	1,453.2
1962	1,040.7		259.0	1,299.7	239.1	1,538.8
1963	1,103.2		306.6	1,409.7	247.1	1,656.8
1964	1,258.3		347.0	1,605.3	265.4	1,870.7
1965	1,179.5		308.5	1,488.0	246.2	1,734.2
1966	1,276.2		367.8	1,644.0	260.2	1,904.2
1967	1,386.9		316.7	1,703.6	254.3	1,957.9
1968	1,489.6		381.3	1,870.9	270.9	2,141.8
1969	1,643.9		360.8	2,004.7	232.6	2,237.3
1970	1,877.5		427.5	2,305.0	283.6	2,588.6
1971	853.6	1,083.6	483.4	2,420.6	595.2	3,015.9
1972	956.5	858.4	553.3	2,368.4	549.5	2,917.9
1973	542.8	871.6	511.4	1,925.8	477.2	2,403.0
1974	497.2	812.5	387.9	1,697.6	419.8	2,117.4
1975	374.5	623.4	385.8	1,383.6	301.6	1,685.2
1976	478.1	804.5	d	1,282.6	250.9	1,533.5
1977	489.1	873.9	d	1,363.0	241.1	1,604.1
1978	544.2	763.7	d	1,307.9	187.9	1,495.8
1979	665.2	893.6	d	1,558.8	335.0	1,893.8
1980	962.6	1,071.2	d	2,033.8	415.2	2,449.0

a. Excludes direct sales by producers to electric utilities.
b. No breakdown available prior to 1971.
c. Represents transfers by the gas department to the electric department of combination gas and electric companies.
d. Other now included with Industrial to conform to the definition of industrial services.

TABLE 73
GAS UTILITY INDUSTRY GAS USED FOR ELECTRIC GENERATION BY STATE, 1980[a]

(Trillions of Btu)

Division and State	Industrial Sales			Transfers[b]	Total Sales and Transfers
	Firm	Interruptible	Total		
United States	**962.6**	**1,071.2**	**2,033.8**	**415.2**	**2,449.0**
New England	**0.0**	**7.1**	**7.1**	**0.0**	**7.1**
Connecticut	0.0	0.0	0.0	0.0	0.0
Maine	0.0	0.0	0.0	0.0	0.0
Massachusetts	0.0	5.4	5.4	0.0	5.4
New Hampshire	0.0	0.0	0.0	0.0	0.0
Rhode Island	0.0	1.7	1.7	0.0	1.7
Vermont	0.0	0.0	0.0	0.0	0.0
Middle Atlantic	**1.5**	**18.5**	**20.0**	**196.3**	**216.3**
New Jersey	0.0	18.3	18.3	66.6	84.9
New York	0.1	0.0	0.1	129.6	129.7
Pennsylvania	1.4	0.3	1.7	0.1	1.7
East North Central	**33.2**	**17.4**	**50.6**	**6.5**	**57.2**
Illinois	14.7	1.9	16.6	1.5	18.1
Indiana	0.1	0.0	0.1	1.6	1.7
Michigan	16.6	3.3	19.8	0.0	19.8
Ohio	0.4	c	0.4	3.0	3.4
Wisconsin	1.3	12.3	13.6	0.5	14.1
West North Central	**11.7**	**91.3**	**103.0**	**7.7**	**110.7**
Iowa	c	3.3	3.4	2.0	5.4
Kansas	1.8	48.1	49.9	1.1	51.1
Minnesota	c	33.9	33.9	2.1	35.9
Missouri	c	4.9	4.9	2.5	7.3
Nebraska	9.9	1.1	10.9	0.0	10.9
North Dakota	0.0	c	c	0.0	c
South Dakota	0.0	0.0	0.0	c	c
South Atlantic	**1.6**	**96.4**	**98.0**	**9.6**	**107.6**
Delaware	0.0	4.4	4.4	0.0	4.4
District of Columbia	0.0	0.0	0.0	0.0	0.0
Florida	0.8	87.5	88.3	0.0	88.3
Georgia	0.0	4.0	4.0	0.0	4.0
Maryland	0.0	0.0	0.0	4.9	4.9
North Carolina	0.3	0.5	0.8	0.0	0.8
South Carolina	0.5	c	0.5	3.4	4.0
Virginia	0.0	0.0	0.0	1.3	1.3
West Virginia	0.0	0.0	0.0	0.0	0.0
East South Central	**57.1**	**13.3**	**70.4**	**1.6**	**72.0**
Alabama	c	c	c	0.0	c
Kentucky	0.0	0.0	0.0	1.2	1.2
Mississippi	57.1	12.0	69.1	0.2	69.3
Tennessee	0.0	1.3	1.3	0.2	1.5
West South Central	**778.2**	**244.4**	**1,022.6**	**149.4**	**1,172.0**
Arkansas	2.4	c	2.4	0.0	2.4
Louisiana	147.1	0.0	147.1	109.5	256.6
Oklahoma	140.9	18.5	159.4	c	159.4
Texas	487.7	225.9	713.7	40.0	753.6
Mountain	**77.9**	**53.7**	**131.6**	**43.2**	**174.8**
Arizona	34.5	0.2	34.8	17.1	51.9
Colorado	1.8	28.4	30.2	16.7	46.9
Idaho	0.0	0.0	0.0	0.0	0.0
Montana	0.0	0.1	0.1	4.0	4.1
Nevada	29.2	0.0	29.2	5.1	34.3
New Mexico	12.3	25.0	37.3	0.3	37.6
Utah	0.0	0.0	0.0	0.0	0.0
Wyoming	0.0	0.0	0.0	c	c
Pacific	**1.3**	**529.1**	**530.4**	**0.9**	**531.4**
Alaska	0.0	16.7	16.7	0.0	16.7
California	1.3	512.0	513.4	0.0	513.4
Hawaii	0.0	0.0	0.0	0.0	0.0
Oregon	0.0	0.3	0.3	0.0	0.3
Washington	0.0	0.0	0.0	0.9	0.9

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a. Excludes direct sales by producers to electric utilities.
b. Volumes transferred by the gas department to the electric department of combination gas and electric companies.
c. Less than 0.05 trillion Btu.

TABLE 75
GAS UTILITY INDUSTRY LARGE VOLUME SALES BY TYPE OF INDUSTRY, 1955-1980

(Trillions of Btu)

Industry Classification	1955	1960	1965	1970	1975	1979	1980
Agriculture, forestry and fisheries	8.5	10.8	12.0	33.0	49.7	33.0	47.1
Petroleum and natural gas production	41.9	48.3	97.8	101.0	83.8	34.6	32.2
Other mining	14.2	44.8	69.8	59.8	49.3	45.1	55.6
Electric services	1,062.8	1,420.4	1,734.2	2,588.6	1,685.2	1,890.1	2,449.0
Other transportation, communications and public utilities	11.2	22.4	38.5	96.2	95.9	104.0	92.5
Hotels, rooming houses, camps	10.1	16.2	33.5	67.3	77.8	26.5	27.8
Laundries, cleaning and dyeing	2.6	4.0	16.3	21.5	24.3	23.4	22.0
Other services	34.3	34.2	70.1	175.1	236.7	314.5	309.5
Other non-manufacturing	41.8	43.1	74.9	198.6	187.5	171.5	151.8
Ordnance	13.4	14.1	21.2	35.4	b	b	b
Food and kindred products	119.6	167.8	243.0	330.5	338.9	312.9	320.2
Textile products, apparel, fabrics, etc.	16.0	22.6	43.7	72.5	54.6	52.4	63.9
Furniture, lumber and other wood products	10.8	23.1	52.3	64.9	61.1	45.3	45.7
Paper and allied products	121.5	193.2	267.5	402.7	267.6	244.3	257.5
Carbon black	2.8	15.0	42.0	52.8	38.2	31.0	34.1
Chemicals and allied products (except carbon black)	257.3	519.6	644.6	880.7	886.5	605.8	603.4
Petroleum refining	286.2	384.1	375.1	639.6	514.5	300.8	372.0
Rubber and miscellaneous plastic products	42.3	16.8	38.9	47.8	45.1	52.5	50.7
Glass products	90.2	138.4	184.8	208.8	173.7	172.5	170.9
Cement	129.1	169.6	183.5	195.0	158.1	58.8	49.2
Clay products, pottery, etc.	83.6	129.6	153.7	145.3	110.0	93.6	86.4
Other stone products and miscellaneous	30.6	30.8	68.3	82.3	97.0	95.6	85.5
Primary iron and steel industries	204.8	346.1	552.4	669.0	555.5	614.4	546.3
Primary non-ferrous industries	197.3	208.1	270.8	232.9	275.9	211.7	194.4
Fabricated metal products, machinery equipment and supplies	69.3	110.7	181.6	289.8	276.8	241.5	232.7
Transportation equipment	46.9	65.1	112.0	170.8	140.2	96.7	84.4
Other manufacturing	32.0	33.9	63.3	100.0	122.1	106.6	121.0
Public Administration	c	c	c	c	72.1	72.2	70.0
Total (Sum)[a]	**2,981.1**	**4,232.8**	**5,645.9**	**7,961.9**	**6,678.3**	**6,051.3**	**6,576.0**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**3,199.0**	**4,512.7**	**6,050.0**	**8,022.9**	**8,786.0**	**7,690.0**	**7,950.9**
Total Gas Utility Industry Commercial, Industrial and "Other" sales[d]	**3,817.0**	**5,179.8**	**6,636.5**	**9,113.2**	**9,871.9**	**10,377.3**	**10,586.4**

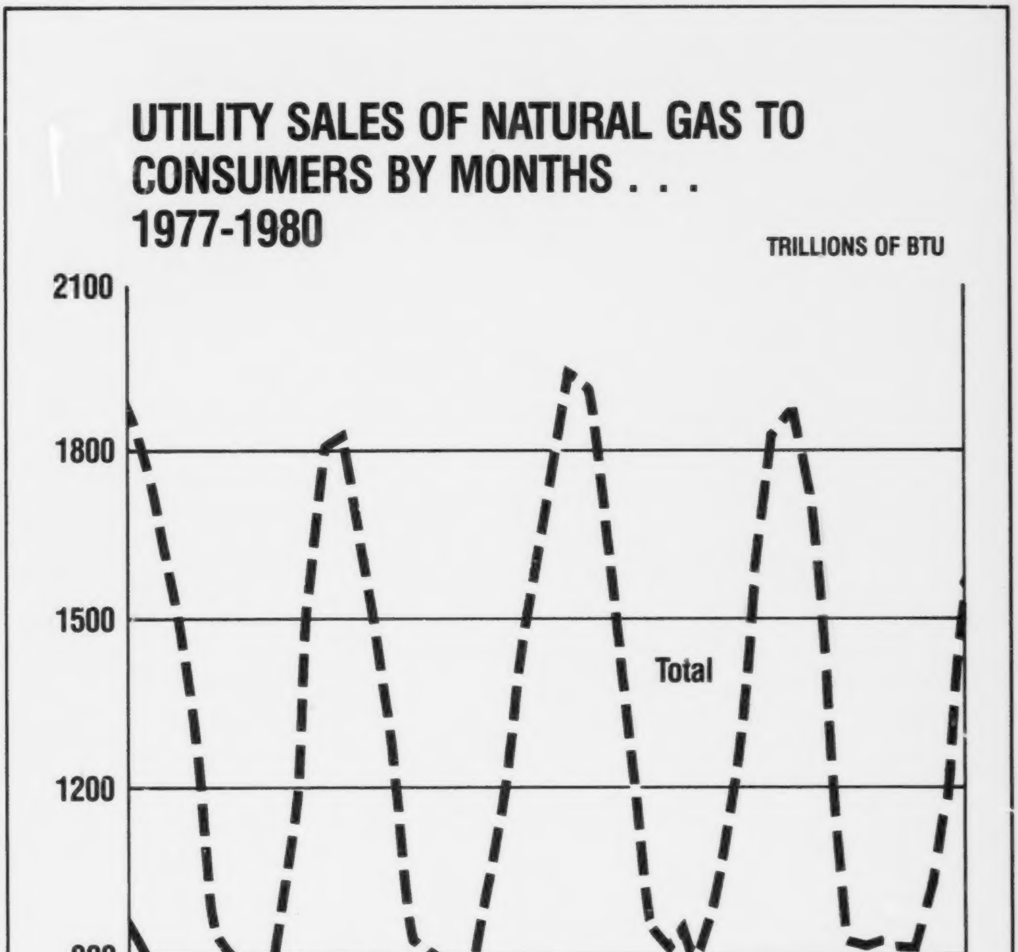
a. Includes the following quantities of gas for electric generation not included in Total Commercial, Industrial, and "Other" sales of companies reporting this table or in Total Gas Utility Industry sales. Such quantities represent transfers by the gas department to the electric department of combination gas and electric companies. Quantities in trillions of Btu's are: 1955-191.2; 1960-234.1; 1965-245.2; 1970-283.6; 1975-301.6; 1978-187.9; 1979-334.9; and 1980-415.2.

b. Classification eliminated.

c. New classification in 1972.

d. Includes Industrial and "Other" sales only prior to 1971.

CHART 15



REFERENCE: TABLE 76

TABLE 77
GAS UTILITY INDUSTRY SALES, BY QUARTER AND CLASS OF SERVICE
1955-1980

(Trillions of Btu)

Year and Quarter	Total	Residential	Commercial	Industrial*	Other*
1955					
First	2,100.0	967.4	248.1	815.0	69.3
Second	1,524.5	448.4	119.2	887.8	69.1
Third	1,277.7	203.2	66.9	936.1	71.5
Fourth	1,748.6	614.2	166.4	895.9	72.1
1960					
First	3,124.9	1,459.0	404.6	1,119.7	141.6
Second	2,171.3	679.8	188.0	1,197.1	106.4
Third	1,676.1	265.5	92.7	1,222.1	95.8
Fourth	2,309.7	780.0	232.8	1,170.3	126.6
1965					
First	3,946.6	1,811.2	575.2	1,424.3	135.9
Second	2,818.1	878.9	291.2	1,538.8	109.2
Third	2,212.1	346.1	144.9	1,603.3	117.8
Fourth	3,001.0	961.1	332.8	1,580.0	127.1
1970					
First	5,262.3	2,286.9	867.7	1,939.2	168.6
Second	3,808.1	1,024.3	423.8	2,201.4	158.4
Third	3,041.5	420.7	218.6	2,236.1	166.0
Fourth	3,931.6	1,191.8	496.5	2,062.5	181.0
1973					
First	5,354.8	2,264.0	950.7	1,910.2	229.9
Second	3,985.6	1,091.9	500.0	2,197.4	196.3
Third	3,215.0	465.3	280.4	2,237.5	231.8
Fourth	3,924.5	1,172.4	549.8	2,025.7	176.6
1974					
First	5,185.5	2,105.9	908.5	1,985.9	185.1
Second	3,865.1	1,055.0	496.4	2,163.3	150.5
Third	3,078.0	472.6	295.1	2,136.5	173.9
Fourth	3,871.6	1,231.2	593.4	1,867.5	179.5
1975					
First	4,931.5	2,192.8	970.4	1,598.7	169.6
Second	3,520.9	1,137.7	536.3	1,715.9	131.0
Third	2,794.9	474.9	301.2	1,842.2	176.6
Fourth	3,615.6	1,185.6	579.0	1,680.2	170.8
1976					
First	4,893.1	2,165.1	957.6	1,692.4	78.0
Second	3,317.7	963.9	472.4	1,826.4	55.0
Third	2,709.1	446.7	309.2	1,896.0	57.2
Fourth	3,893.5	1,438.5	683.4	1,692.3	79.4
1977					
First	5,010.3	2,395.4	1,019.4	1,506.9	88.7
Second	3,047.7	855.5	448.8	1,682.7	60.7
Third	2,602.9	425.6	314.7	1,804.0	58.6
Fourth	3,680.0	1,269.8	626.5	1,717.1	66.6
1978					
First	5,290.3	2,460.1	1,098.9	1,626.8	104.4
Second	3,220.5	960.2	491.4	1,705.8	63.2
Third	2,613.5	426.6	294.7	1,834.5	57.7
Fourth	3,624.1	1,259.9	614.5	1,674.1	75.7
1979					
First	5,479.5	2,462.8	1,095.8	1,793.4	127.5
Second	3,366.0	965.7	486.3	1,854.5	59.5
Third	2,715.4	431.2	283.8	1,953.8	46.6
Fourth	3,879.4	1,223.4	619.9	1,953.3	82.8
1980					
First	5,440.9	2,216.7	1,025.5	2,096.5	102.2
Second	3,250.4	912.8	461.9	1,822.6	53.1
Third	2,744.1	405.8	299.6	1,991.8	46.9
Fourth	3,974.1	1,287.7	654.6	1,951.2	80.6

*Prior to 1976, "Other" electric generation (see Table 72) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

TABLE 78
HEATING DEGREE DAYS[a] BY CALENDAR YEAR AND HEATING SEASONS, 1979–1980, AND THIRTY-YEAR NORMALS

Division and State	Calendar Year Degree Days 30-Year[c] Normals 1946-1975	1979	1980	Heating Season Degree Days[b] 30-Year[c] Normals 1946/47-1975/76	1979-1980	1980-1981
United States	**4,761**	**5,064**	**5,004**	**3,851**	**3,829**	**3,921**
New England	**6,461**	**6,292**	**6,827**	**4,987**	**5,005**	**5,314**
Connecticut	6,091	5,816	6,246	4,778	4,556	5,046
Maine	8,008	7,723	8,494	5,922	5,782	6,145
Massachusetts	6,241	6,148	6,709	4,840	4,757	5,230
New Hampshire	7,544	7,294	7,911	5,707	5,469	5,908
Rhode Island	5,097	5,734	6,173	4,562	4,393	4,917
Vermont	7,856	7,689	8,335	5,962	5,720	6,287
Middle Atlantic	**5,743**	**5,894**	**6,158**	**4,586**	**4,576**	**4,953**
New Jersey	5,444	5,529	5,751	4,364	4,342	4,785
New York	5,863	5,951	6,272	4,659	4,618	4,985
Pennsylvania	5,758	6,029	6,251	4,607	4,654	5,014
East North Central	**6,245**	**6,909**	**6,780**	**5,036**	**5,198**	**5,148**
Illinois	6,059	6,901	6,579	4,992	5,199	4,960
Indiana	5,375	6,452	6,283	4,709	4,939	4,857
Michigan	6,718	7,219	7,263	5,287	5,373	5,459
Ohio	5,769	6,316	6,429	4,658	4,865	5,013
Wisconsin	7,556	8,272	7,813	5,940	5,950	5,678
West North Central	**6,604**	**7,458**	**6,662**	**5,395**	**4,476**	**4,892**
Iowa	6,864	7,668	6,890	5,626	5,584	5,101
Kansas	4,932	5,678	5,078	4,238	4,425	3,809
Minnesota	8,772	9,477	8,652	6,875	6,724	6,139
Missouri	5,020	5,896	5,378	4,290	4,548	4,154
Nebraska	6,388	7,127	6,311	5,238	5,304	4,570
North Dakota	9,534	10,441	9,085	7,346	7,171	6,274
South Dakota	7,731	8,482	7,349	6,120	5,960	5,214
South Atlantic	**3,074**	**3,124**	**3,391**	**2,655**	**2,746**	**2,999**
Delaware	4,743	4,803	4,950	3,955	3,906	4,194
District of Columbia	d	d	d	d	d	d
Florida	683	803	840	672	725	996
Georgia	2,674	2,905	3,004	2,408	2,526	2,740
Maryland	4,742[e]	4,872[e]	5,017	3,965[e]	3,938[e]	4,207
North Carolina	3,378	3,554	3,766	2,950	3,100	3,356
South Carolina	2,672	2,832	3,030	2,423	2,578	2,784
Virginia	4,262	4,498	4,636	3,591	3,688	3,954
West Virginia	5,093	5,482	5,695	4,157	4,346	4,625
East South Central	**3,411**	**3,889**	**3,845**	**2,996**	**3,247**	**3,295**
Alabama	2,701	3,085	3,089	2,441	2,661	2,779
Kentucky	4,404	4,903	4,893	3,750	3,994	4,023
Mississippi	2,410	2,891	2,772	2,219	2,493	2,503
Tennessee	3,807	4,333	4,275	3,307	3,580	3,610
West South Central	**2,267**	**2,758**	**2,444**	**2,104**	**2,277**	**2,165**
Arkansas	3,216	3,564	3,564	2,903	2,980	2,980
Louisiana	1,700	2,152	1,960	1,608	1,837	1,929
Oklahoma	3,516	4,170	3,626	3,175	3,330	2,938
Texas	2,012	2,450	2,145	1,887	2,025	1,928
Mountain	**5,673**	**5,970**	**11,581**	**4,301**	**4,317**	**3,764**
Arizona	2,328	2,471	1,995	2,065	1,921	1,605
Colorado	7,066	7,691	7,031	5,179	5,498	4,627
Idaho	6,950	7,124	6,643	5,102	4,994	4,584
Montana	8,322	8,492	7,857	5,904	5,832	4,980
Nevada	4,398	4,348	3,990	3,477	3,296	2,968
New Mexico	4,778	4,947	4,554	3,864	3,769	3,490
Utah	6,628	6,888	6,354	5,026	4,963	4,559
Wyoming	7,917	8,263	7,692	5,701	5,894	4,924
Pacific	**3,364**	**3,205**	**2,987**	**2,465**	**2,227**	**2,025**
Alaska	f	f	f	f	f	f
California	2,748	2,590	2,308	2,094	1,785	1,666
Hawaii	f	f	f	f	f	f
Oregon	5,284	5,098	5,162	3,6[illegible]0	3,569	3,219
Washington	5,814	5,636	5,654	3,9[illegible]4	3,983	3,409

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a. See glossary for definitions of (heating) degree days. Division heating degree days are the weighted average of all states in a region, according to the 1970 population. National heating degree days are the weighted average of all divisions, according to the 1970 population.

b. Heating season is defined as November through March period.

c. The transference of many weather stations between city locations and nearby airports at some time during the 30 year period had led to the introduction of slight inconsistencies in the average data.

d. Included in Maryland.

e. Includes the District of Columbia.

f. Not available.

Source. National Oceanic and Atmospheric Administration.

TABLE 79
SALES OF PRODUCERS OF NATURAL GAS TO INTERSTATE TRANSMISSION COMPANIES, BY STATE, 1960-1975[a]

	1960	1965	1970	1974	1975	
Division and State	(Millions of cubic feet)	(Millions of cubic feet)	(Millions of cubic feet)	(Millions of cubic feet)	(Millions of cubic feet)	Percent of total
Grand Total	**8,106,413**	**10,315,400**	**14,440,737**	**13,524,575**	**12,467,987**	**100.0**
Total United States	**7,967,502**	**9,892,833**	**13,671,952**	**12,615,924**	**11,566,076**	**92.8**
New England	**0**	**0**	**0**	**0**	**0**	**0.0**
Middle Atlantic	**48,137**	**23,172**	**21,007**	**21,695**	**21,429**	**0.2**
New Jersey	0	0	0	0	0	0.0
New York	3,508	2,195	1,163	1,932	1,693	b
Pennsylvania	44,629	20,977	19,844	19,763	19,736	0.2
East North Central	**17,753**	**15,902**	**27,482**	**24,445**	**22,150**	**0.2**
Illinois	546	0	0	0	0	0.0
Indiana	0	88	42	0	56	b
Michigan	23	0	77	0	0	0.0
Ohio	17,184	15,814	27,363	24,445	22,094	0.2
Wisconsin	0	0	0	0	0	0.0
West North Central	**493,083**	**625,158**	**682,872**	**718,302**	**669,911**	**5.4**
Iowa	0	0	0	0	0	0.0
Kansas	474,882	600,479	662,317	703,500	655,494	5.3
Minnesota	0	0	0	0	0	0.0
Missouri	0	0	0	0	0	0.0
Nebraska	8,711	5,404	3,522	3,269	2,666	b
North Dakota	9,490	19,275	17,033	11,533	11,751	0.1
South Dakota	0	0	0	0	0	0.0
South Atlantic	**83,295**	**101,753**	**135,810**	**100,042**	**90,726**	**0.7**
Delaware	0	0	0	0	0	0.0
District of Columbia	0	0	0	0	0	0.0
Florida	0	0	2	24,026	18,074	0.1
Georgia	0	0	0	0	0	0.0
Maryland	3,998	109	122	56	7	b
North Carolina	0	0	0	0	0	0.0
South Carolina	0	0	0	0	0	0.0
Virginia	2,293	1,938	1,726	1,285	1,259	b
West Virginia	77,004	99,706	133,960	74,675	71,386	0.6
East South Central	**176,043**	**172,221**	**133,655**	**73,760**	**59,165**	**0.5**
Alabama	14	44	2	7,771	7,215	0.1
Kentucky	21,853	30,965	18,849	16,177	14,603	0.1
Mississippi	154,176	141,212	114,804	49,812	37,347	0.3
Tennessee	0	0	c	0	0	0.0
West South Central	**6,471,407**	**8,114,087**	**11,601,011**	**10,524,987**	**9,572,899**	**76.8**
Arkansas	33,236	51,212	133,340	80,210	74,822	0.6
Louisiana	2,387,261	3,555,147	6,027,448	5,669,947	5,242,480	42.0
Oklahoma	468,336	818,458	1,190,020	1,031,020	915,886	7.3
Texas	3,582,574	3,689,270	4,250,203	3,743,810	3,339,711	26.8
Mountain	**677,784**	**840,540**	**1,070,115**	**1,152,693**	**1,129,796**	**9.1**
Arizona	0	1,430	1,125	19	3	b
Colorado	52,560	42,434	61,630	80,157	97,877	0.8
Idaho	0	0	0	0	0	0.0
Montana	1,704	963	4,200	23,031	17,930	0.1
Nevada	0	0	0	0	0	0.0
New Mexico	445,504	573,058	733,730	789,702	755,106	6.1
Utah	39,446	41,220	30,882	25,106	28,108	0.2
Wyoming	138,570	181,435	238,548	234,678	230,772	1.9
Pacific	**0**	**0**	**0**	**0**	**0**	**0.0**
Canada	**91,935**	**370,577**	**727,442**	**907,929**	**901,912**	**7.2**
Mexico	**46,976**	**51,990**	**41,343**	**222**	**0**	**0.0**

a. Data refer to volume of natural gas purchased from domestic and foreign producers by interstate natural gas pipelines. These pipeline companies accounted for about 70 percent of all natural gas produced and marketed in the United States.
b. Less than 0.1 percent.
c. Less than 500 Mcf.
Source: Federal Power Commission. *Sales of Producers of Natural Gas to Interstate Pipeline Companies.*

TABLE 74

GAS UTILITY INDUSTRY LARGE VOLUME SALES, BY TYPE OF INDUSTRY AND BY DIVISION, 1980

(Trillions of Btu)

Industry Classification	Total U.S.	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Agriculture, forestry and fisheries	47.1	0.6	0.4	6.8	6.3	11.3	0.4	4.9	1.9	14.5
Petroleum and natural gas production	32.2	0.0	a	a	5.5	a	1.1	7.9	6.9	10.8
Other mining	55.6	a	0.0	4.4	0.4	14.4	0.1	9.7	19.6	6.9
Electric services[b]	2,449.0	7.1	216.3	57.2	110.7	107.6	72.0	1,172.0	174.8	531.4
Other transportation, communication, and public utilities	92.5	5.6	1.3	17.8	34.4	2.9	0.5	11.0	3.5	15.5
Hotels, rooming houses, and camps	27.8	0.3	4.2	9.5	1.1	1.1	0.0	1.4	0.6	9.7
Laundries, cleaning and dyeing	22.0	a	0.5	8.7	a	0.6	0.1	0.2	0.0	11.9
Other services	309.5	5.6	16.2	149.7	17.6	13.3	7.9	12.1	10.6	76.5
Other non-manufacturing	151.8	3.6	16.3	60.0	4.3	4.2	3.7	1.8	9.0	48.9
Food and kindred products	320.2	2.6	19.2	114.0	54.4	14.7	10.5	12.3	18.0	74.5
Textile products, apparel, fabrics, etc.	63.9	2.4	4.8	6.7	0.1	37.7	6.3	1.0	0.0	4.9
Furniture, lumber, and other wood products	45.7	a	1.4	6.1	1.4	1.8	14.4	6.5	1.0	13.0
Paper and allied products	257.5	2.3	17.1	61.8	5.9	38.2	49.3	31.3	12.8	38.9
Carbon black	34.1	a	0.0	1.1	18.4	0.6	8.7	4.6	0.0	0.7
Chemicals and allied products (except carbon black)	603.4	3.4	27.8	136.1	82.1	107.9	40.3	130.1	23.9	51.8
Petroleum refining	372.0	0.1	3.3	21.3	17.2	7.1	10.7	167.6	15.9	128.6
Rubber and miscellaneous plastic products	50.7	0.5	5.3	20.6	3.6	3.3	6.2	3.5	2.0	5.7
Glass products	170.9	1.4	48.2	50.5	7.8	20.9	8.0	9.3	0.9	23.9
Cement	49.2	0.1	0.1	1.6	9.1	15.1	4.5	4.3	3.9	10.4
Clay products, pottery, etc.	86.4	1.8	9.8	13.0	14.8	26.7	6.6	1.5	3.4	8.9
Other stone products and miscellaneous	85.5	1.0	9.4	19.9	7.6	17.0	3.0	0.8	2.5	24.3
Primary iron and steel industries	546.3	2.6	123.6	286.9	27.6	38.9	32.0	1.9	9.5	23.3
Primary non-ferrous industries	194.4	3.0	31.6	62.6	7.6	9.0	19.4	6.2	29.9	25.0
Fabricated metal products, machinery equipment and supplies	232.7	6.3	31.6	130.3	15.1	8.6	12.9	1.0	1.9	25.1
Transportation equipment	84.4	1.2	8.7	49.6	5.5	3.7	1.9	1.3	0.4	12.0
Other manufacturing	121.0	3.2	13.0	41.5	15.2	7.6	14.3	5.1	1.9	19.3
Public administration	70.0	1.0	5.0	16.6	5.5	14.2	2.2	3.1	3.4	19.1
Total (Sum)[b]	**6,576.0**	**55.9**	**615.2**	**1,354.1**	**479.3**	**528.3**	**337.0**	**1,612.3**	**358.3**	**1,235.5**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**7,950.9**	**124.4**	**744.8**	**1,779.0**	**708.6**	**700.2**	**427.2**	**1,724.1**	**454.5**	**1,288.2**
Total Gas Utility Industry Commercial, Industrial and "Other" sales	**10,586.4**	**154.4**	**870.2**	**2,080.1**	**923.2**	**931.9**	**602.7**	**3,110.7**	**580.3**	**1,332.9**

a. Less than 0.05 trillions of Btu.

b. Includes the following quantities of gas for electric generation not included in Total Commerical, Industrial and "Other" sales of companies reporting this table or in Total Gas Utility Industry sales. Such quantities represent transfers by the gas department to the electric department of combination gas and electric companies:

Total U.S.	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
415.2	0.0	196.3	6.5	7.7	9.6	1.6	149.4	43.2	0.9

TABLE 76

GAS UTILITY INDUSTRY SALES, BY MONTH, 1955-1980

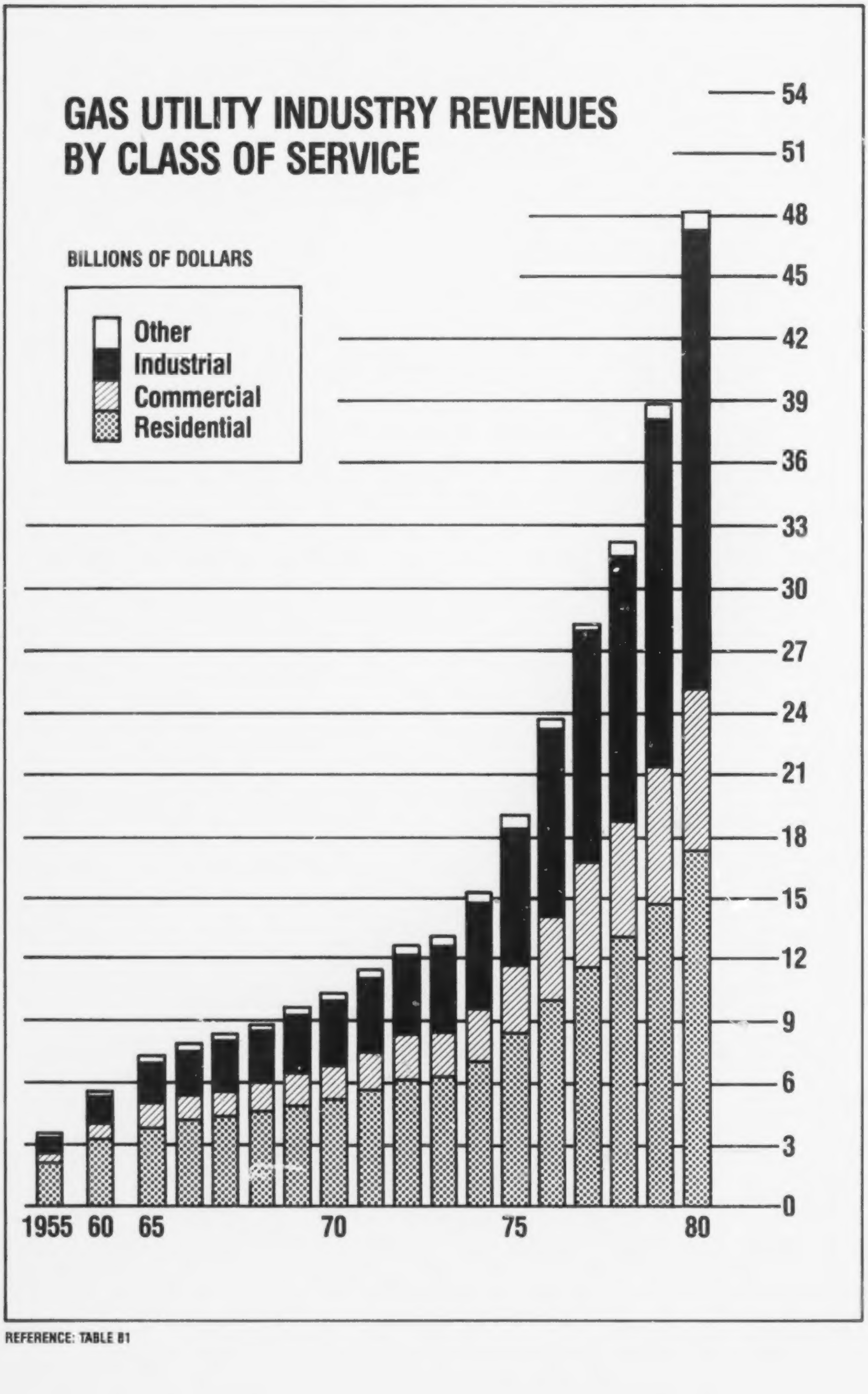
(Trillions of Btu)

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1955-Total	693.5	730.0	676.4	590.1	487.3	447.1	417.6	427.2	432.8	467.1	566.3	715.1	6,650.5
1960-Total	1,031.3	1,015.3	1,078.4	860.1	693.6	617.5	557.4	561.6	557.0	607.4	753.5	948.9	9.282.0
1965-Total	1,304.0	1,329.2	1,313.4	1,168.2	874.9	775.0	748.0	732.8	731.3	823.5	979.4	1,197.9	11,977.6
1966-Total	1,355.8	1,468.4	1,368.4	1,171.5	1,011.7	865.7	796.8	783.8	799.1	890.3	1,066.8	1,278.6	12,856.9
1967-Total	1,502.8	1,426.1	1,429.8	1,183.9	1,064.2	911.9	829.1	822.3	829.6	923.6	1,151.6	1,411.3	13,486.2
1968-Total	1,671.0	1,589.2	1,556.1	1,241.9	1,100.9	978.8	907.0	878.4	880.7	955.6	1,185.4	1,525.4	14,470.4
1969-Total	1,784.4	1,640.0	1,636.8	1,375.3	1,124.0	1,008.9	988.2	954.5	946.6	1,030.6	1,289.9	1,610.5	15,389.7
1970-Total	1,865.8	1,733.0	1,663.0	1,527.7	1,225.7	1,054.3	1,013.5	1,020.2	1,007.5	1,081.1	1,283.7	1,566.4	16,041.9
1971-Total	1,886.8	1,873.5	1,769.5	1,559.1	1,312.2	1,145.2	1,053.3	1,037.4	1,023.7	1,100.9	1,305.7	1,618.4	16,685.7
1972-Total	1,833.1	1,908.1	1,758.3	1,542.6	1,292.5	1,176.1	1,056.1	1,125.9	1,094.5	1,120.0	1,378.7	1,796.2	17,082.1
1973-Total	1,909.4	1,752.8	1,645.3	1,500.1	1,332.1	1,143.8	1,104.8	1,069.0	1,063.1	1,136.5	1,306.7	1,516.3	16,479.9
1974-Total	1,847.6	1,707.2	1,630.7	1,493.6	1,251.6	1,119.9	1,050.8	1,034.9	992.3	1,115.2	1,219.8	1,536.7	16,000.3
1975-Total	1,709.5	1,633.6	1,588.4	1,455.3	1,120.8	944.8	924.7	934.8	935.4	1,009.2	1,102.8	1,503.6	14,862.9
1976-Total	1,797.5	1,644.6	1,451.0	1,252.2	1,099.8	965.6	913.1	900.8	899.1	996.4	1,278.3	1,614.7	14,813.5
1977-Total	1,901.9	1,682.7	1,425.7	1,168.4	974.8	904.5	875.8	866.5	860.7	976.7	1,153.5	1,549.8	14,340.9
1978-Total	1,808.7	1,834.1	1,647.5	1,237.7	1,061.4	921.4	895.1	878.8	839.6	947.7	1,151.1	1,525.5	14,748.4
1979-Total	1,925.1	1,923.8	1,630.5	1,356.3	1,074.6	934.9	903.7	920.9	891.3	1,038.9	1,253.4	1,587.0	15,440.4
1980-Total	1,837.5	1,874.5	1,728.9	1,312.7	1,021.5	916.2	925.1	915.0	904.1	1,023.8	1,288.9	1,661.3	15,409.4

SECTION IX
REVENUES

	1980	% Change 80/79
Gas Utility Industry ($Thousands)		
Total	48,276,152	+24.0
Residential	17,409,365	+17.4
Commercial	8,148,700	+23.0
Industrial	22,081,335	+30.2
Other	636,752	+20.2
Resale	37,860,065	+34.7
Electric Generation	5,499,880	+61.5

CHART 16



REFERENCE: TABLE 81

REVENUES

TABLE 81
GAS UTILITY INDUSTRY REVENUES, BY CLASS OF SERVICE, 1955-1980[a]

(Thousands)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1955	$ 3,449,699	$ 2,007,450	$ 424,090	$ 937,591	$ 80,568
1956	3,850,071	2,236,500	471,258	1,065,568	76,745
1957	4,133,555	2,378,938	505,678	1,149,931	99,008
1958	4,568,321	2,657,616	571,212	1,228,980	110,513
1959	5,065,228	2,870,473	632,665	1,431,237	130,853
1960	5,617,387	3,177,430	723,448	1,563,285	153,224
1961	5,992,879	3,376,781	789,202	1,658,276	168,620
1962	6,444,860	3,603,266	874,366	1,795,894	171,334
1963	6,726,815	3,727,868	910,497	1,905,733	182,717
1964	7,132,685	3,894,870	998,386	2,048,527	190,902
1965	7,406,978	4,029,562	1,053,647	2,147,958	175,811
1966	7,869,888	4,195,331	1,135,352	2,334,654	204,551
1967	8,260,739	4,382,837	1,223,897	2,460,885	193,120
1968	8,781,152	4,567,307	1,315,409	2,675,261	223,175
1969	9,479,566	4,883,029	1,459,054	2,918,973	218,510
1970	10,282,611	5,207,335	1,620,446	3,181,206	273,624
1971	11,357,392	5,635,395	1,829,309	3,568,582	324,106
1972	12,465,235	6,094,171	2,063,803	3,943,011	364,250
1973	12,987,272	6,246,988	2,172,460	4,196,714	371,110
1974	15,242,481	6,899,395	2,539,300	5,391,139	412,647
1975	19,074,323	8,445,484	3,302,567	6,718,098	608,174
1976	23,701,211	9,941,013	4,075,009	9,373,932	311,257
1977	28,303,200	11,540,805	4,979,890	11,385,220	397,285
1978	32,149,921	12,938,865	5,695,666	13,064,676	450,714
1979	38,947,143	14,832,950	6,623,766	16,960,870	529,557
1980	48,276,152	17,409,365	8,148,700	22,081,335	636,752

a. Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.

b. Prior to 1976 "Other" electric generation (refer to Table 72) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

TABLE 82
GAS UTILITY INDUSTRY REVENUES, BY STATE AND CLASS OF SERVICE, 1980

(Thousands)

		Class of Service			
Division and State	Total	Residential	Commercial	Industrial*	Other
United States	**$48,276,152**	**$17,409,365**	**$8,148,700**	**$22,081,335**	**$636,752**
New England	**1,478,953**	**787,618**	**390,859**	**286,611**	**13,865**
Connecticut	367,131	187,258	94,589	84,987	297
Maine	11,155	3,524	4,427	3,204	0
Massachusetts	905,414	494,308	250,242	148,880	11,984
New Hampshire	40,411	19,679	13,652	6,755	325
Rhode Island	131,407	73,874	22,673	34,860	0
Vermont	23,435	8,975	5,276	7,925	1,259
Middle Atlantic	**6,572,797**	**3,451,620**	**1,151,549**	**1,843,130**	**126,498**
New Jersey	1,397,083	732,652	311,433	351,285	1,713
New York	2,663,655	1,621,115	450,333	504,528	87,679
Pennsylvania	2,512,059	1,097,853	389,783	987,317	37,106
East North Central	**11,584,305**	**5,322,806**	**2,273,346**	**3,951,101**	**37,052**
Illinois	3,585,939	1,710,299	736,389	1,138,182	1,069
Indiana	1,343,550	510,728	197,731	629,948	5,143
Michigan	2,602,792	1,236,812	600,388	764,636	956
Ohio	2,875,397	1,391,739	528,435	927,213	28,010
Wisconsin	1,176,627	473,228	210,403	491,122	1,874
West North Central	**3,777,426**	**1,508,381**	**817,897**	**1,424,508**	**26,640**
Iowa	718,370	271,204	146,313	298,470	2,383
Kansas	814,816	196,224	98,551	511,571	8,470
Minnesota	750,994	331,408	161,281	247,013	11,292
Missouri	992,492	505,320	274,912	208,280	3,980
Nebraska	356,352	134,132	81,620	140,401	199
North Dakota	77,168	36,994	35,091	4,957	126
South Dakota	67,234	33,099	20,129	13,816	190
South Atlantic	**4,166,514**	**1,430,970**	**791,591**	**1,855,087**	**88,866**
Delaware	78,336	29,688	13,913	33,424	1,311
District of Columbia	120,837	62,799	58,038	0	0
Florida	614,847	81,304	106,618	418,345	8,580
Georgia	952,865	375,087	167,579	401,581	8,618
Maryland	598,324	305,808	114,280	178,016	220
North Carolina	495,459	125,471	82,298	284,015	3,675
South Carolina	402,503	77,885	48,907	214,368	61,343
Virginia	482,080	201,910	122,109	153,150	4,911
West Virginia	421,263	171,018	77,849	172,188	208
East South Central	**2,306,365**	**687,602**	**339,691**	**1,229,143**	**49,929**
Alabama	698,761	222,808	89,386	384,652	1,915
Kentucky	509,390	228,385	96,570	167,087	17,348
Mississippi	518,014	103,700	46,129	343,917	24,268
Tennessee	580,200	132,709	107,606	333,487	6,398
West South Central	**8,940,601**	**1,268,625**	**649,687**	**6,787,658**	**234,631**
Arkansas	397,029	94,109	53,868	246,300	2,752
Louisiana	1,215,478	220,335	74,436	895,246	25,461
Oklahoma	965,723	181,546	96,815	685,169	2,193
Texas	6,362,371	772,635	424,568	4,960,943	204,225
Mountain	**2,355,307**	**800,067**	**468,314**	**1,040,038**	**46,888**
Arizona	382,384	116,073	59,853	201,180	5,278
Colorado	705,152	288,733	197,228	216,054	3,137
Idaho	182,600	36,772	37,454	108,374	0
Montana	163,917	58,976	42,171	52,705	10,065
Nevada	196,982	56,022	41,580	98,246	1,134
New Mexico	333,855	92,902	43,878	170,010	27,065
Utah	284,725	126,126	32,240	126,306	53
Wyoming	105,692	24,463	13,910	67,163	156
Pacific	**7,093,884**	**2,151,676**	**1,265,766**	**3,664,059**	**12,383**
Alaska	38,725	13,764	5,087	19,874	0
California	6,076,193	1,870,338	1,028,747	3,166,518	10,590
Hawaii	45,162	10,626	11,821	22,715	0
Oregon	354,502	103,183	77,578	173,741	0
Washington	579,302	153,765	142,533	281,211	1,793

*Includes Electric Generation—See Table 87 for breakout.

TABLE 83
GAS UTILITY INDUSTRY REVENUES, BY STATE, 1955-1980[a]

(Thousands)

Division and State	1955	1960	1965	1970	1975	1979	1980
United States	**$3,449,699**	**$5,617,387**	**$7,406,978**	**$10,282,611**	**$19,101,498**	**$38,947,143**	**$48,276,152**
New England	**137,844**	**212,719**	**274,937**	**377,666**	**700,071**	**1,154,340**	**1,478,953**
Connecticut	34,385	52,198	66,653	98,178	178,480	284,987	367,131
Maine	3,288	3,608	3,845	4,013	5,983	8,584	11,155
Massachusetts	83,648	131,588	171,040	228,224	425,411	710,637	905,414
New Hampshire	3,072	5,126	7,336	10,328	17,190	31,293	40,411
Rhode Island	12,071	18,803	24,599	34,360	65,982	101,989	131,407
Vermont	1,380	1,396	1,464	2,563	7,025	16,850	23,435
Middle Alantic	**702,954**	**1,068,271**	**1,342,428**	**1,753,799**	**2,940,846**	**5,205,040**	**6,572,797**
New Jersey	113,207	192,315	268,622	372,672	594,560	1,088,899	1,397,083
New York	307,619	462,574	570,984	720,609	1,248,149	2,101,493	2,663,655
Pennsylvania	282,128	413,382	502,822	660,518	1,098,137	2,014,648	2,512,059
East North Central	**836,988**	**1,394,218**	**1,995,933**	**2,888,886**	**5,033,327**	**10,095,310**	**11,584,305**
Illinois	234,844	393,707	555,763	829,369	1,504,405	3,248,762	3,585,939
Indiana	83,758	135,593	218,436	356,270	530,454	1,170,015	1,343,550
Michigan	165,884	290,178	434,292	651,318	1,269,106	2,236,049	2,602,792
Ohio	304,392	483,987	625,011	789,008	1,254,154	2,465,672	2,875,397
Wisconsin	48,110	90,753	162,431	262,921	475,208	974,812	1,176,627
West North Central	**360,139**	**540,961**	**701,789**	**982,976**	**1,585,864**	**3,271,588**	**3,777,426**
Iowa	57,598	96,062	127,197	180,607	311,364	631,844	718,370
Kansas	77,092	100,563	125,238	178,128	282,119	657,809	814,816
Minnesota	68,250	113,648	156,680	218,398	352,170	692,898	750,994
Missouri	97,997	144,596	187,021	267,726	406,752	838,496	992,492
Nebraska	46,606	66,334	77,722	101,542	169,010	320,989	356,352
North Dakota	3,516	5,712	10,566	15,540	31,037	66,576	77,168
South Dakota	9,080	14,046	17,365	21,035	33,412	62,976	67,234
South Atlantic	**251,976**	**476,032**	**631,577**	**941,975**	**1,538,752**	**3,254,967**	**4,166,514**
Delaware	4,732	10,102	15,881	22,672	33,229	64,856	78,336
District of Columbia	20,584	26,868	29,602	34,635	54,671	92,274	120,837
Florida	19,972	47,537	73,357	120,609	146,526	466,567	614,847
Georgia	54,175	104,603	127,728	191,637	349,550	754,497	952,865
Maryland	50,017	87,037	113,321	163,999	272,830	486,070	598,324
North Carolina	10,954	30,669	54,773	106,051	165,659	355,430	495,459
South Carolina	7,966	23,344	42,736	74,858	130,662	291,517	402,503
Virginia	39,081	67,569	89,235	126,840	206,109	384,873	482,080
West Virginia	44,495	78,303	84,944	100,674	179,516	358,883	421,263
East South Central	**183,932**	**312,695**	**365,717**	**509,350**	**775,705**	**1,839,646**	**2,306,365**
Alabama	56,338	93,652	113,647	149,962	237,710	579,898	698,761
Kentucky	43,491	80,075	91,310	127,787	199,738	411,919	509,390
Mississippi	34,821	60,254	68,331	100,383	134,730	371,211	518,014
Tennessee	49,282	78,714	92,429	131,218	203,527	476,618	580,200
West South Central	**404,335**	**642,063**	**771,223**	**1,066,433**	**2,953,148**	**6,979,469**	**8,940,601**
Arkansas	40,176	58,303	83,252	125,928	175,862	347,120	397,029
Louisiana	82,473	141,741	165,926	219,303	386,609	1,138,637	1,215,478
Oklahoma	57,738	88,272	103,263	127,367	328,817	872,633	965,723
Texas	223,948	353,747	418,782	593,835	2,061,860	4,621,079	6,362,371
Mountain	**149,959**	**246,824**	**325,757**	**456,593**	**920,668**	**2,049,483**	**2,355,307**
Arizona	30,301	52,255	65,722	95,423	171,773	360,604	382,384
Colorado	50,380	69,462	88,404	120,563	241,901	577,045	705,152
Idaho	54	11,555	19,776	28,990	75,818	142,799	182,600
Montana	15,736	22,159	32,003	42,871	82,021	139,459	163,917
Nevada	2,762	8,786	17,544	32,383	79,858	191,596	196,982
New Mexico	22,104	38,804	43,638	56,975	125,617	296,668	333,855
Utah	19,651	32,269	43,572	55,273	101,164	227,855	284,725
Wyoming	8,971	11,534	15,098	24,115	42,516	113,457	105,692
Pacific	**421,572**	**723,604**	**997,617**	**1,304,933**	**2,653,117**	**5,097,300**	**7,093,884**
Alaska	b	b	4,575	11,678	24,829	36,536	38,725
California	401,969	653,350	875,876	1,117,573	2,193,048	4,243,333	6,076,193
Hawaii	b	5,003	6,053	7,714	24,125	32,930	45,162
Oregon	11,230	24,806	42,169	65,096	156,703	307,910	354,502
Washington	8,373	40,445	68,944	102,872	254,412	476,591	579,302

a. Excludes revenues from sales for resale.
b. Not available.

TABLE 84
GAS UTILITY INDUSTRY REVENUES FROM GAS FOR RESALE BY STATE, 1955-1980[a]

(Thousands)

Division and State	1955	1960	1965	1970	1975	1979	1980
United States	**$1,657,585**	**$3,165,820**	**$4,255,066**	**$6,217,662**	**$11,573,752**	**$28,104,263**	**$37,860,065**
New England	**37,000**	**82,195**	**110,807**	**168,196**	**382,550**	**663,309**	**851,449**
Connecticut				51,891	125,226	209,990	222,022
Maine				0	0	0	0
Massachusetts				94,590	216,069	382,076	529,965
New Hampshire				5,319	5,744	12,330	17,577
Rhode Island				16,396	34,645	58,913	81,885
Vermont				0	866	0	0
Middle Atlantic	**303,647**	**575,739**	**777,878**	**1,057,060**	**1,761,307**	**3,929,214**	**5,807,469**
New Jersey				215,211	365,302	750,462	1,250,773
New York				371,895	532,961	1,242,544	1,829,091
Pennsylvania				469,951	863,044	1,936,208	2,727,605
East North Central	**398,895**	**699,808**	**1,151,990**	**1,940,570**	**3,596,246**	**8,482,001**	**10,687,835**
Illinois				529,299	1,041,633	2,659,109	3,412,478
Indiana				188,301	292,665	826,493	988,871
Michigan				278,232	659,019	1,417,583	1,804,423
Ohio				756,382	1,144,706	2,533,141	3,145,106
Wisconsin				188,355	458,223	1,045,675	1,336,957
West North Central	**169,161**	**251,580**	**306,416**	**439,274**	**803,046**	**1,869,478**	**2,198,971**
Iowa				105,106	202,852	439,368	517,052
Kansas				52,935	89,538	213,212	265,146
Minnesota				100,758	178,677	470,159	554,425
Missouri				127,783	231,990	556,522	628,970
Nebraska				42,394	77,384	145,047	174,217
North Dakota				2,186	7,695	14,039	22,277
South Dakota				8,114	14,910	31,131	36,884
South Atlantic	**247,567**	**487,720**	**597,386**	**748,392**	**1,094,146**	**2,664,983**	**3,521,954**
Delaware				680	1,170	2,180	2,894
District of Columbia				0	0	0	0
Florida				24,297	54,786	151,459	218,749
Georgia				122,268	217,592	574,194	709,353
Maryland				81,983	159,003	358,507	480,609
North Carolina				38,167	96,134	243,700	440,145
South Carolina				75,078	86,854	229,190	254,185
Virginia				99,200	177,878	395,067	542,737
West Virginia				306,719	300,729	710,686	873,282
East South Central	**179,598**	**343,356**	**348,642**	**495,572**	**752,002**	**2,085,623**	**2,694,348**
Alabama				79,205	140,282	430,126	495,051
Kentucky				156,277	169,609	404,624	527,511
Mississippi				92,771	163,268	466,881	632,103
Tennessee				167,320	278,843	783,992	1,039,683
West South Central	**120,055**	**238,630**	**236,059**	**324,987**	**765,273**	**2,624,036**	**4,326,478**
Arkansas				6,684	9,328	21,201	34,680
Louisiana				192,241	354,067	1,083,773	1,383,886
Oklahoma				33,698	91,809	249,643	426,008
Texas				92,363	310,069	1,269,419	2,481,904
Mountain	**169,331**	**375,843**	**437,321**	**622,947**	**1,349,007**	**3,339,102**	**4,449,354**
Arizona				482,102	935,305	2,251,654	3,093,184
Colorado				65,331	163,200	524,703	657,917
Idaho				24,852	96,221	202,514	228,724
Montana				3,435	7,289	36,360	25,957
Nevada				2,950	12,147	27,229	36,042
New Mexico				20,924	34,447	87,779	111,849
Utah				4,186	3,113	13,800	18,087
Wyoming				19,168	97,285	195,063	277,594
Pacific	**32,331**	**110,949**	**288,567**	**420,664**	**1,070,175**	**2,446,517**	**3,322,207**
Alaska				0	0	0	22,677
California				249,666	294,546	806,786	1,199,764
Hawaii				0	0	0	0
Oregon				120,229	598,295	1,267,097	1,665,022
Washington				50,769	177,334	372,634	434,744

a. Excludes revenues from sales for resale.
b. Not available.

TABLE 85

GAS UTILITY INDUSTRY FIRM AND INTERRUPTIBLE GAS REVENUES BY STATE, 1980

(Thousands)

Division and State	Commercial			Industrial		
	Total	Firm	Interruptible	Total	Firm	Interruptible
United States	**$8,148,700**	**$7,641,993**	**$506,707**	**$22,081,335**	**$12,914,590**	**$9,166,745**
New England	**390,859**	**354,752**	**36,107**	**286,611**	**168,067**	**118,544**
Connecticut	94,589	91,020	3,569	84,987	65,981	19,006
Maine	4,427	4,427	0	3,204	3,204	0
Massachusetts	250,242	218,130	32,112	148,880	80,193	68,687
New Hampshire	13,652	13,652	0	6,755	4,104	2,651
Rhode Island	22,673	22,247	426	34,860	14,087	20,773
Vermont	5,276	5,276	0	7,925	498	7,427
Middle Atlantic	**1,151,549**	**1,113,978**	**37,571**	**1,843,130**	**1,368,247**	**474,883**
New Jersey	311,433	282,896	28,537	351,285	175,370	175,915
New York	450,333	443,950	6,383	504,528	334,662	159,866
Pennsylvania	389,783	387,132	2,651	987,317	848,215	139,102
East North Central	**2,273,346**	**2,220,156**	**53,190**	**3,951,101**	**3,212,908**	**738,193**
Illinois	736,389	735,123	1,266	1,138,182	976,554	161,628
Indiana	197,731	188,259	9,472	629,948	550,392	79,556
Michigan	600,388	594,285	6,103	764,636	601,327	163,309
Ohio	528,435	524,510	3,925	927,213	867,424	59,789
Wisconsin	210,403	177,979	32,424	491,122	217,211	273,911
West North Central	**817,897**	**675,535**	**142,362**	**1,424,508**	**594,326**	**830,182**
Iowa	146,313	123,183	23,130	298,470	216,339	82,131
Kansas	98,551	68,538	30,013	511,571	146,396	365,175
Minnesota	161,281	134,382	26,899	247,013	84,659	162,354
Missouri	274,912	229,436	45,476	208,280	62,035	146,245
Nebraska	81,620	75,578	6,042	140,401	83,552	56,849
North Dakota	35,091	26,136	8,955	4,957	0	4,957
South Dakota	20,129	18,282	1,847	13,816	1,345	12,471
South Atlantic	**791,591**	**705,659**	**85,932**	**1,855,087**	**902,814**	**952,273**
Delaware	13,913	13,049	864	33,424	24,737	8,687
District of Columbia	58,038	46,439	11,599	0	0	0
Florida	106,618	88,505	18,113	418,345	70,289	348,056
Georgia	167,579	166,863	716	401,581	61,310	340,271
Maryland	114,280	91,685	22,595	178,016	84,647	93,369
North Carolina	82,298	82,199	99	284,015	254,155	29,860
South Carolina	48,907	37,956	10,951	214,368	128,467	85,901
Virginia	122,109	104,230	17,879	153,150	107,546	45,604
West Virginia	77,849	74,733	3,116	172,188	171,663	525
East South Central	**339,691**	**315,239**	**24,452**	**1,229,143**	**832,052**	**397,091**
Alabama	89,386	78,524	10,862	384,652	215,007	169,645
Kentucky	96,570	88,496	8,074	167,087	89,300	77,787
Mississippi	46,129	46,119	10	343,917	334,514	9,403
Tennessee	107,606	102,100	5,506	333,487	193,231	140,256
West South Central	**649,687**	**636,238**	**13,449**	**6,787,658**	**4,955,990**	**1,831,668**
Arkansas	53,868	53,169	699	246,300	219,043	27,257
Louisiana	74,436	74,387	49	895,246	681,799	213,447
Oklahoma	96,815	87,040	9,775	685,169	451,793	233,376
Texas	424,568	421,642	2,926	4,960,943	3,603,355	1,357,588
Mountain	**468,314**	**462,105**	**6,209**	**1,040,038**	**530,536**	**509,502**
Arizona	59,853	59,853	0	201,180	195,281	5,899
Colorado	197,228	196,456	772	216,054	48,695	167,359
Idaho	37,454	35,671	1,783	108,374	94,188	14,186
Montana	42,171	41,549	622	52,705	3,943	48,762
Nevada	41,580	41,580	0	98,246	98,246	0
New Mexico	43,878	40,921	2,957	170,010	41,013	128,997
Utah	32,240	32,240	0	126,306	33,793	92,513
Wyoming	13,910	13,835	75	67,163	15,377	51,786
Pacific	**1,265,766**	**1,158,331**	**107,435**	**3,664,059**	**349,650**	**3,314,409**
Alaska	5,087	5,087	0	19,874	5,220	14,654
California	1,028,747	957,170	71,577	3,166,518	95,939	3,070,579
Hawaii	11,821	11,821	0	22,715	22,715	0
Oregon	77,578	75,000	2,578	173,741	91,534	82,207
Washington	142,533	109,253	33,280	281,211	134,242	146,969

TABLE 86
GAS UTILITY INDUSTRY REVENUES FROM GAS USED FOR ELECTRIC GENERATION, 1955-1980[a]

(Thousands)

	Revenue					
	Industrial[b]					
Year	Firm	Interruptible	Other	Total Revenue	Credits[c]	Total Revenue and Credits
1955	$126,296		$ 35,157	$ 161,453	$ 39,196	$ 200,649
1956	149,241		33,174	182,415	38,386	220,801
1957	159,909		38,469	198,378	47,608	245,986
1958	178,563		38,393	216,956	61,494	278,450
1959	205,448		52,050	257,498	54,441	311,939
1960	228,474		64,585	293,059	73,887	366,946
1961	247,811		75,437	323,248	74,988	398,236
1962	264,637		86,810	351,447	75,747	427,194
1963	282,932		96,808	379,740	73,517	453,257
1964	304,974		107,193	412,167	77,919	490,086
1965	293,999		94,119	388,118	72,919	461,037
1966	325,605		114,051	439,656	73,073	512,729
1967	346,912		96,643	443,555	75,298	518,853
1968	380,995		117,159	498,154	80,816	578,970
1969	426,325		112,454	538,779	71,747	610,526
1970	520,882		137,553	658,435	92,443	750,878
1971	$ 237,111	$ 335,539	160,035	732,685	201,213	933,898
1972	277,344	294,885	201,865	774,094	193,655	967,749
1973	185,106	309,653	214,419	709,178	197,418	906,596
1974	271,516	395,889	225,124	892,529	269,148	1,161,677
1975	352,660	473,951	361,969	1,188,580	293,936	1,482,516
1976	594,784	1,015,066	d	1,609,850	315,935	1,925,785
1977	779,919	1,465,678	d	2,245,597	379,274	2,624,871
1978	953,406	1,378,534	d	2,331,940	330,572	2,662,512
1979	1,424,871	1,979,676	d	3,404,547	721,948	4,126,495
1980	2,391,685	3,108,195	d	5,499,880	1,166,459	6,666,339

a. Excludes revenues from direct sales by producers to straight electric utilities.
b. No breakdown available prior to 1971.
c. Represents "Revenues" from transfers of gas for electric generation. Such "Revenues" are credits by the electric department to the gas department of combination gas and electric companies.
d. Other now included with Industrial to conform to the definition of industrial services.

TABLE 87

GAS UTILITY INDUSTRY REVENUES, GAS USED FOR ELECTRIC GENERATION, BY STATE, 1980[a]

(Thousands)

Division and State	Industrial Revenue				Total Revenue and Credits
	Firm	Interruptible	Total	Credits[b]	
United States	**$2,391,685**	**$3,108,195**	**$5,499,880**	**$1,166,459**	**$6,666,339**
New England	**0**	**24,602**	**24,602**	**0**	**24,602**
Connecticut	0	0	0	0	0
Maine	0	0	0	0	0
Massachusetts	0	18,781	18,781	0	18,781
New Hampshire	0	0	0	0	0
Rhode Island	0	5,821	5,821	0	5,821
Vermont	0	0	0	0	0
Middle Atlantic	**4,770**	**62,999**	**67,769**	**559,788**	**627,557**
New Jersey	0	62,049	62,049	193,456	255,505
New York	278	0	278	366,243	366,521
Pennsylvania	4,492	950	5,442	89	5,531
East North Central	**100,251**	**50,838**	**151,089**	**16,830**	**167,919**
Illinois	49,285	4,875	54,160	3,039	57,199
Indiana	371	0	371	3,899	4,270
Michigan	46,624	9,511	56,135	0	56,135
Ohio	1,063	82	1,145	8,543	9,688
Wisconsin	2,908	36,370	39,278	1,349	40,627
West North Central	**22,376**	**185,904**	**208,280**	**15,710**	**223,990**
Iowa	86	8,080	8,166	3,879	12,045
Kansas	4,399	86,983	91,382	2,278	93,660
Minnesota	9	76,985	76,994	4,110	81,104
Missouri	44	11,442	11,486	5,390	16,876
Nebraska	17,838	2,373	20,211	0	20,211
North Dakota	0	41	41	0	41
South Dakota	0	0	0	53	53
South Atlantic	**5,271**	**218,661**	**223,932**	**21,749**	**245,681**
Delaware	0	14,401	14,401	0	14,401
District of Columbia	0	0	0	0	0
Florida	2,403	192,326	194,729	0	194,729
Georgia	0	10,290	10,290	0	10,290
Maryland	0	0	0	11,181	11,181
North Carolina	1,185	1,589	2,774	0	2,774
South Carolina	1,683	55	1,738	7,226	8,964
Virginia	0	0	0	3,342	3,342
West Virginia	0	0	0	0	0
East South Central	**126,991**	**34,540**	**161,531**	**3,046**	**164,577**
Alabama	33	10	43	0	43
Kentucky	0	0	0	2,446	2,446
Mississippi	126,958	31,542	158,500	260	158,760
Tennessee	0	2,988	2,988	340	3,328
West South Central	**1,941,270**	**571,844**	**2,513,114**	**407,397**	**2,920,511**
Arkansas	2,632	72	2,704	0	2,704
Louisiana	352,291	0	352,291	302,798	655,089
Oklahoma	251,466	38,220	289,686	45	289,731
Texas	1,334,881	533,552	1,868,433	104,554	1,972,987
Mountain	**186,237**	**134,034**	**320,271**	**138,591**	**458,862**
Arizona	77,897	637	78,534	43,849	122,383
Colorado	5,071	74,447	79,518	58,406	137,924
Idaho	0	0	0	0	0
Montana	0	166	166	16,625	16,791
Nevada	76,333	0	76,333	19,065	95,398
New Mexico	26,936	58,784	85,720	630	86,350
Utah	0	0	0	0	0
Wyoming	0	0	0	16	16
Pacific	**4,519**	**1,824,773**	**1,829,292**	**3,348**	**1,832,640**
Alaska	0	14,652	14,652	0	14,652
California	4,519	1,808,453	1,812,972	0	1,812,972
Hawaii	0	0	0	0	0
Oregon	0	1,668	1,668	0	1,668
Washington	0	0	0	3,348	3,348

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a. Excludes revenues from direct sales by producers to electric utilities.

b. Represents, "Revenues" from transfers of gas for electric generation. Such "Revenues" are credits by the electric department to the gas department of combination gas and electric companies.

TABLE 80

TOTAL ETHANE AND LIQUIFIED PETROLEUM GAS SALES IN LIQUID FORM TO ULTIMATE CONSUMERS: BY MAJOR USE, 1955-1979[a]

(Thousands of gallons)

Year	Total	Gas Utility	Residential and Commercial	Industrial	Refinery Fuel	Internal Combustion Engine Fuel	Chemical Manufacturing	Synthetic Rubber	Other[b]
1955	6,122,718	213,760	2,801,379	423,431	101,033	651,821	1,493,177	406,210	31,907
1956	6,635,763	212,293	3,001,021	438,916	142,500	773,471	1,600,604	418,101	48,767
1957	6,939,121	231,155	3,067,070	441,474	122,405	805,056	1,732,338	418,189	121,434
1958	7,462,089	238,911	3,293,677	492,862	179,231	852,387	1,898,862	371,961	134,198
1959	8,919,161	182,903	3,934,792	439,200	136,830	889,698	2,525,910	513,941	295,887
1960	9,554,649	157,041	4,224,537	438,659	157,036	897,915	3,019,011	538,971	111,479
1961	9,797,883	168,989	4,318,215	402,428	166,572	880,315	3,239,479	519,637	102,248
1962	10,729,394	173,481	4,712,682	424,730	231,084	931,611	3,571,339	587,379	97,088
1963	11,570,278	216,627	5,053,157	493,208	356,958	999,363	3,771,413	599,556	79,996
1964	12,473,258	117,004	5,180,794	521,006	439,110	1,176,260	4,315,725	651,472	71,887
1965	12,908,899	121,895	5,345,972	526,420	153,258	1,193,818	4,802,780	679,884	84,872
1966	13,594,755	109,310	5,681,636	552,911	92,820	1,213,514	5,096,044	734,276	114,244
1967	14,466,144	96,596	6,221,839	635,079	c	1,152,264	5,444,023	756,259	160,084
1968	16,165,632	171,193	6,718,108	807,866	c	1,228,498	6,250,067	775,465	214,435
1969	18,716,376	183,062	7,656,872	948,574	c	1,467,094	7,487,137	757,050	216,587
1970	18,789,162	212,177	7,568,691	897,130	c	1,335,851	7,730,058	790,655	254,600
1971	19,183,542	209,778	7,668,413	908,965	c	1,324,126	8,809,319	d	262,941
1972	21,833,700	302,481	8,253,340	1,124,263	c	1,479,190	10,358,858	d	315,568
1973	22,199,048	344,436	7,845,991	1,094,898	c	1,409,302	10,977,239	d	527,182
1974	21,538,692	356,848	7,231,035	1,069,319	c	1,309,750	10,654,038	d	917,702
1975	20,430,690	402,752	7,019,989	1,081,929	c	1,162,396	9,403,057	d	1,360,567
1976	21,586,740	445,947	7,313,023	1,051,753	c	1,169,766	9,658,488	d	1,947,763
1977	21,823,452	566,115	7,168,585	1,043,455	c	1,144,930	9,893,749	d	2,006,618
1978	21,657,468	496,789	6,954,440	1,339,928	c	993,277	10,197,845	d	1,675,189
1979	18,926,598	786,775	4,748,233	2,066,393	c	440,826	8,159,835	d	2,724,536

a. Excludes LPG sales for export or for use in gasoline production. Includes ethane, propane, butane, and butane-propane mixtures.
b. Includes secondary recovery of petroleum, agriculture uses, and use as substitute natural gas feedstock.
c. Included in "Industrial."
d. Included in "Chemical Manufacturing."
Source: Energy Information Administration, U.S. Department of Energy, *Liquefied Petroleum Gas Sales Annual.*

TABLE 88

GAS UTILITY INDUSTRY REVENUES FROM LARGE VOLUME SALES, BY TYPE OF INDUSTRY AND BY DIVISION, 1980

(Thousands)

Industry Classification	Total U.S.	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Agriculture, forestry and fisheries	$ 137,952	$ 1,924	$ 1,491	$ 19,355	$ 13,249	$ 30,671	$ 1,247	$ 8,593	$ 5,090	$ 56,332
Petroleum and natural gas production	88,218	0	2	100	11,988	13	2,951	18,485	17,729	36,950
Other mining	156,244	100	0	12,068	875	36,169	330	21,325	59,003	26,374
Electric services*	6,666,339	24,602	627,557	167,919	223,990	245,681	164,577	2,920,511	458,862	1,832,640
Other transportation, communication, and public utilities	260,028	23,256	4,968	65,352	76,167	8,942	1,109	26,028	9,748	44,458
Hotels, rooming houses, and camps	97,608	1,588	18,440	30,644	2,796	3,164	0	3,470	1,714	35,792
Laundries, cleaning and dyeing	76,146	84	1,676	28,085	123	1,980	314	474	0	43,410
Other services	1,014,596	24,459	60,169	485,914	41,059	41,374	12,307	28,743	29,646	290,925
Other non-manufacturing	566,099	18,438	65,464	236,816	9,428	14,771	10,753	4,274	22,582	183,573
Food and kindred products	984,769	10,333	74,804	317,980	127,962	43,938	21,677	31,472	55,985	300,618
Textile products, apparel, fabrics, etc.	191,077	10,559	16,696	11,508	155	115,092	16,566	2,514	0	17,987
Furniture, lumber, and other wood products	140,531	64	4,597	19,435	3,302	5,310	38,135	13,151	3,469	53,068
Paper and allied products	760,238	8,862	57,128	167,259	13,540	100,517	136,432	83,971	43,020	149,509
Carbon black	61,842	186	0	3,124	42,589	1,649	0	12,037	0	2,257
Chemicals and allied products (except carbon black)	1,701,272	13,741	92,364	410,867	239,742	305,890	104,693	282,508	72,151	179,316
Petroleum refining	1,333,883	529	9,514	57,702	55,363	17,886	27,887	620,493	38,752	505,757
Rubber and miscellaneous plastic products	148,661	2,128	17,939	56,929	8,806	10,206	16,716	9,057	5,396	21,484
Glass products	1,141,285	5,122	776,069	139,098	17,115	64,484	20,769	19,897	2,619	96,112
Cement	135,038	462	375	4,402	18,695	38,114	11,845	10,997	10,229	39,919
Clay products, pottery, etc.	254,296	6,777	31,369	37,085	32,959	77,315	23,054	3,697	9,254	32,786
Other stone products and miscellaneous	296,558	3,665	32,804	83,629	15,725	47,969	8,477	1,614	6,704	95,971
Primary iron and steel industries	1,533,600	9,781	353,042	805,094	65,506	98,515	85,868	4,400	26,663	84,731
Primary non-ferrous industries	591,491	13,089	107,707	194,168	16,781	26,579	52,632	12,884	74,095	93,556
Fabricated metal products, machinery equipment and supplies	713,715	27,850	104,443	384,306	37,933	27,878	31,052	2,322	5,628	92,303
Transportation equipment	281,186	4,757	28,691	170,821	13,417	11,494	3,364	2,827	1,232	44,583
Other manufacturing	374,512	13,340	47,025	132,595	32,604	23,301	36,479	11,924	4,801	72,443
Public administration	227,343	4,797	22,375	45,346	11,891	42,641	8,607	6,904	9,625	75,157
Total (Sum)*	**$19,934,527**	**$230,493**	**$2,556,709**	**$4,087,601**	**$1,133,760**	**$1,441,543**	**$ 837,841**	**$4,164,572**	**$ 973,997**	**$4,508,011**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**$23,900,590**	**$562,305**	**$2,684,640**	**$5,329,441**	**$1,690,126**	**$2,067,284**	**$1,043,231**	**$4,453,352**	**$1,252,081**	**$4,818,130**
Total Gas Utility Industry Commercial, Industrial and "Other" sales	**$30,866,787**	**$691,335**	**$3,121,177**	**$6,261,499**	**$2,269,045**	**$2,735,544**	**$1,618,763**	**$7,671,976**	**$1,555,240**	**$4,942,208**

*Includes the following "revenues" from transfers of gas for electric generation not included in Total Commercial, Industrial and "Other" revenues of companies reporting this table or in Total Gas Industry revenues. Such "revenues" represent credits by the electric department to the gas department of combination gas and electric companies.

$1,166,459	$0	$559,788	$16,830	$15,710	$21,749	$3,046	$407,397	$138,591	$3,348

TABLE 89
REVENUES FROM LARGE VOLUME GAS UTILITY INDUSTRY SALES, BY TYPE OF INDUSTRY, 1955-1980

(Thousands)

Industry Classification	1955	1960	1965	1970	1975	1979	1980
Agriculture, forestry and fisheries	$ 2,391	$ 3,447	$ 4,553	$ 13,373	$ 41,816	$ 78,068	$ 137,952
Petroleum and natural gas production	7,387	13,023	23,092	29,116	67,556	71,454	88,218
Other mining	3,122	10,738	18,697	18,744	44,664	101,365	156,244
Electric services[a]	200,649	366,946	461,037	750,879	1,482,516	4,140,313	6,666,339
Other transportation, communications and public utilities	3,101	6,212	12,867	36,820	99,971	219,342	260,028
Hotels, rooming houses, camps	2,538	5,225	12,317	34,089	85,216	71,267	97,608
Laundries, cleaning and dyeing	682	1,495	7,969	12,508	30,095	60,244	76,146
Other services	8,722	11,615	25,434	82,737	274,992	787,536	1,014,596
Other non-manufacturing	11,118	13,826	32,472	105,186	228,982	438,757	566,099
Ordnance	4,025	5,362	5,938	14,216	b	b	b
Food and kindred products	33,467	57,331	88,419	140,016	352,172	747,227	984,769
Textile products, apparel, fabrics, etc.	4,189	7,459	16,613	32,563	58,468	128,759	191,077
Furniture, lumber and other wood products	2,055	7,452	18,713	25,097	65,210	111,230	140,531
Paper and allied products	24,917	54,020	80,392	137,086	258,795	550,505	760,238
Carbon black	396	2,435	9,198	12,613	26,646	57,038	61,842
Chemicals and allied products (except carbon black)	61,341	154,556	208,820	303,261	821,397	1,319,769	1,701,272
Petroleum refining	49,685	87,605	88,023	167,312	502,402	766,382	1,333,883
Rubber and miscellaneous plastic products	8,261	5,454	12,314	20,483	47,694	118,795	148,661
Glass products	30,232	59,693	73,844	92,362	183,233	403,862	1,141,285
Cement	28,303	47,540	52,129	81,001	130,210	122,133	135,038
Clay products, pottery, etc.	24,242	49,764	60,873	63,707	111,670	213,487	254,296
Other stone products and miscellaneous	7,798	11,335	26,502	61,841	103,389	225,525	296,558
Primary iron and steel industries	72,362	149,646	232,470	313,595	568,959	1,200,120	1,533,600
Primary non-ferrous industries	42,724	58,181	88,218	89,949	268,145	481,581	591,491
Fabricated metal products, machinery equipment and supplies	30,284	55,360	93,760	162,290	319,800	587,701	713,715
Transportation equipment	20,041	30,767	53,093	92,514	194,678	232,453	281,186
Other manufacturing	8,143	13,053	23,883	45,777	129,238	254,127	374,512
Public Administration	c	c	c	c	74,956	175,420	227,343
Total (Sum)[a]	**$692,175**	**$1,289,540**	**$1,831,640**	**$2,939,135**	**$ 6,572,870**	**$13,664,460**	**$19,934,527**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**$812,651**	**$1,514,995**	**$2,123,185**	**$3,028,083**	**$ 9,473,153**	**$18,397,181**	**$23,900,590**
Total Gas Utility Industry Commercial, Industrial and "Other" sales[d]	**$1,018,159**	**$1,716,509**	**$2,323,769**	**$3,454,830**	**$10,628,839**	**$24,114,193**	**$30,866,787**

a. Includes the following "revenues from transfers of gas for electric generation not included in Total Commercial, Industrial and "Other" revenues of companies reporting this table or in Total Gas Utility Industry revenues. Such "revenues" represent credits by the electric department to the gas department of combination gas and electric companies. "Revenues" in thousands of dollars are: 1955-39,196; 1960-73,887; 1965-72,919; 1970-92,443; 1975-293,936; 1978-330,572; 1979-721,948; and 1980 – 1,166,459.

b. Classification eliminated.

c. New classification in 1972.

d. Includes Industrial and "Other" sales only prior to 1971.

TABLE 90
GAS UTILITY INDUSTRY REVENUES, BY QUARTER AND CLASS OF SERVICE, 1955-1980

(Thousands)

Year and Quarter	Total	Residential	Commercial	Industrial*	Other*
1955					
First	$1,177,002	$ 776,007	$ 162,217	$ 217,670	$ 21,108
Second	761,042	422,305	86,696	232,769	19,272
Third	558,162	244,971	53,951	240,137	19,103
Fourth	933,803	549,888	116,440	246,459	21,016
1960					
First	2,033,980	1,304,810	297,337	385,053	46,780
Second	1,278,858	701,603	153,028	389,985	34,242
Third	860,134	358,237	83,575	388,519	29,803
Fourth	1,431,263	803,400	186,039	399,440	42,384
1965					
First	2,688,389	1,667,580	438,864	528,598	53,347
Second	1,713,833	909,991	230,269	535,235	38,338
Third	1,151,283	461,313	121,320	531,538	37,112
Fourth	1,847,096	986,096	261,769	552,222	47,009
1970					
First	3,742,316	2,197,999	687,117	780,927	76,273
Second	2,342,672	1,136,333	346,748	797,906	61,685
Third	1,624,621	578,747	182,163	803,503	60,208
Fourth	2,573,002	1,294,256	404,418	798,870	75,458
1973					
First	4,553,714	2,545,758	880,504	1,018,622	108,830
Second	3,053,710	1,430,147	484,491	1,032,597	106,475
Third	2,135,809	730,903	266,897	1,055,050	82,959
Fourth	3,244,039	1,540,180	540,568	1,090,445	72,846
1974					
First	4,962,348	2,637,502	936,945	1,282,042	105,859
Second	3,524,656	1,541,800	550,486	1,346,119	86,251
Third	2,658,833	827,067	334,506	1,386,447	110,813
Fourth	4,096,644	1,893,026	717,363	1,376,531	109,724
1975					
First	6,186,624	3,303,345	1,241,263	1,501,044	140,972
Second	4,443,028	1,972,484	734,954	1,619,141	116,449
Third	3,389,737	987,079	438,859	1,776,684	187,115
Fourth	5,054,934	2,182,576	887,491	1,821,229	163,638
1976					
First	7,640,244	3,890,616	1,531,385	2,130,160	88,083
Second	5,130,081	1,974,961	781,438	2,311,382	62,300
Third	4,192,685	1,109,426	515,383	2,497,831	70,045
Fourth	6,738,200	2,966,010	1,246,803	2,434,558	90,828
1977					
First	9,847,887	5,157,004	2,044,743	2,517,578	128,563
Second	5,898,652	2,118,485	930,741	2,766,049	83,377
Third	5,032,784	1,220,430	664,815	3,066,653	80,886
Fourth	7,523,878	3,044,890	1,339,590	3,034,940	104,459
1978					
First	11,443,834	5,794,334	2,412,856	3,080,601	156,043
Second	6,946,269	2,533,334	1,125,102	3,198,846	88,987
Third	5,548,952	1,309,307	690,271	3,463,219	86,155
Fourth	8,210,868	3,301,893	1,467,438	3,322,009	119,528
1979					
First	13,317,971	6,544,017	2,744,291	3,828,209	201,455
Second	8,158,475	2,823,066	1,259,409	3,989,813	86,187
Third	6,809,065	1,517,166	796,336	4,414,613	80,949
Fourth	10,661,631	3,948,701	1,823,730	4,728,234	160,966
1980					
First	16,449,563	7,324,714	3,230,768	5,660,400	233,681
Second	10,066,688	3,378,063	1,560,929	5,010,306	117,390
Third	8,568,658	1,787,650	1,035,418	5,646,520	99,070
Fourth	13,191,243	4,918,938	2,321,585	5,764,109	186,611

*Prior to 1976 "Other" electric generation (see Table 71) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

REVENUES

TABLE 91
REVENUES FROM SALES OF PRODUCERS OF NATURAL GAS TO INTERSTATE TRANSMISSION COMPANIES, BY STATE, 1960-1975[a]

	1960	1965	1970	1974	1975	
Division and State	(Thousands of dollars)	(Thousands of dollars)	(Thousands of dollars)	(Thousands of dollars)	(Thousands of dollars)	Percent of total
Grand Total	**$1,265,381**	**$1,746,967**	**$2,646,161**	**$3,894,705**	**$5,273,464**	**100.0**
Total United States	**1,237,360**	**1,648,337**	**2,451,768**	**3,392,694**	**4,183,906**	**79.3**
New England	**0**	**0**	**0**	**0**	**0**	**0.0**
Middle Atlantic	**13,236**	**6,397**	**5,787**	**9,628**	**13,237**	**0.8**
New Jersey	0	0	0	0	0	0.0
New York	1,052	635	345	1,676	2,605	b
Pennsylvania	12,184	5,762	5,442	7,952	10,632	0.2
East North Central	**4,117**	**3,787**	**7,406**	**10,741**	**13,972**	**0.3**
Illinois	109	0	0	0	0	0.0
Indiana	0	18	7	0	33	b
Michigan	6	0	23	0	0	0.0
Ohio	4,002	3,769	7,376	10,741	13,939	0.3
Wisconsin	0	0	0	0	0	0.0
West North Central	**60,945**	**81,492**	**93,836**	**119,560**	**117,248**	**2.2**
Iowa	0	0	0	0	0	0.0
Kansas	58,715	77,517	90,266	115,449	111,470	2.1
Minnesota	0	0	0	0	0	0.0
Missouri	0	0	0	0	0	0.0
Nebraska	1,224	829	513	857	1,538	b
North Dakota	1,006	3,146	3,057	3,254	4,240	0.1
South Dakota	0	0	0	0	0	0.0
South Atlantic	**19,289**	**24,777**	**34,574**	**36,823**	**34,443**	**0.7**
Delaware	0	0	0	0	0	0.0
District of Columbia	0	0	0	0	0	0.0
Florida	0	0	c	11,335	8,298	0.2
Georgia	0	0	0	0	0	0.0
Maryland	1,082	22	26	12	2	b
North Carolina	0	0	0	0	0	0.0
South Carolina	0	0	0	0	0	0.0
Virginia	621	536	487	370	363	b
West Virginia	17,586	24,219	34,061	25,106	25,780	0.5
East South Central	**36,549**	**33,310**	**26,696**	**21,784**	**18,829**	**0.4**
Alabama	3	9	c	4,083	3,713	0.1
Kentucky	4,714	6,188	4,090	6,068	4,952	0.1
Mississippi	31,832	27,113	22,606	11,633	10,164	0.2
Tennessee	0	0	c	0	0	0.0
West South Central	**1,015,555**	**1,377,977**	**2,116,827**	**2,843,226**	**3,507,135**	**66.5**
Arkansas	4,914	7,974	21,807	18,986	21,229	0.4
Louisiana	461,227	692,317	1,181,529	1,562,025	1,944,735	36.9
Oklahoma	63,483	125,226	205,715	256,614	261,398	5.0
Texas	485,931	552,460	707,776	1,005,601	1,279,773	24.3
Mountain	**87,669**	**120,597**	**166,642**	**350,930**	**479,042**	**9.1**
Arizona	0	185	191	3	c	b
Colorado	6,493	5,740	8,665	26,222	48,732	0.9
Idaho	0	0	0	0	0	0.0
Montana	103	57	596	8,611	8,333	0.2
Nevada	0	0	0	0	0	0.0
New Mexico	54,504	81,056	114,120	254,575	327,143	6.2
Utah	7,840	6,806	5,250	8,061	13,438	0.3
Wyoming	18,729	26,753	37,820	53,458	81,396	1.5
Pacific	**0**	**0**	**0**	**0**	**0**	**0.0**
Canada	**21,052**	**89,706**	**187,578**	**501,974**	**1,089,558**	**20.7**
Mexico	**6,969**	**8,924**	**6,815**	**37**	**0**	**0.0**

a. Data refer to cost of natural gas purchased from domestic and foreign producers by interstate natural gas pipelines. These pipeline companies accounted for about 70 percent of all natural gas produced and marketed in the United States.
b. Less than 0.1 percent.
c. Less than $500.
Source: Federal Power Commission. *Sales of Producers of Natural Gas to Interstate Pipeline Companies.*

SECTION X
PRICES

	1980	% Change 80/79
Gas Utility Industry ($/MMBtu)		
Total	3.13	+24.2
Residential	3.61	+23.6
Commercial	3.34	+25.6
Industrial	2.81	+25.4
Other	2.25	+34.7
Wellhead ($/Mcf)	1.50	+31.6
City Gate	2.41	+33.1
Electric	14.45	+13.9
Number 2 Fuel Oil	7.21	+37.6

TABLE 93
AVERAGE WELLHEAD PRICES OF NATURAL GAS, BY STATE, 1955-1979*

(¢/MCF)

Division and State	1955	1960	1965	1970	1975	1978	1979
United States	**10.4¢**	**14.0¢**	**15.6¢**	**17.1¢**	**44.5¢**	**90.5¢**	**117.8¢**
New England	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Middle Atlantic	**29.9**	**31.8**	**26.9**	**28.0**	**68.0**	**90.1**	**131.8**
New Jersey	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New York	29.5	30.9	30.8	30.3	74.0	119.0	126.6
Pennsylvania	29.9	31.8	26.7	27.9	67.5	86.0	132.6
East North Central	**19.0**	**21.0**	**23.1**	**26.4**	**66.6**	**135.9**	**176.8**
Illinois	14.2	12.5	11.7	15.7	70.0	129.0	186.1
Indiana	12.4	18.8	23.6	23.7	39.0	71.0	105.4
Michigan	11.5	21.4	25.1	26.7	63.4	119.7	174.0
Ohio	22.5	23.5	23.6	27.1	70.6	157.0	180.5
Wisconsin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
West North Central	**12.0**	**11.8**	**13.4**	**14.1**	**17.5**	**56.7**	**77.0**
Iowa	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kansas	11.1	11.7	13.3	14.0	17.2	57.04	75.6
Minnesota	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Missouri	20.0	25.0	24.5	24.5	34.0	0.0	0.0
Nebraska	20.4	17.5	14.6	17.1	54.1	68.0	85.0
North Dakota	7.7	11.4	16.0	16.4	23.0	46.2	128.0
South Dakota	0.0	0.0	0.0	0.0	0.0	0.0	210.7
South Atlantic	**23.8**	**26.2**	**23.4**	**25.5**	**50.4**	**86.6**	**120.1**
Delaware	0.0	0.0	0.0	0.0	0.0	0.0	0.0
District of Colmbia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Florida	10.0	16.2	12.9	0.0	97.3	139.0	157.2
Georgia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maryland	20.1	26.6	25.2	24.9	27.0	61.4	103.6
North Carolina	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Carolina	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Virginia	26.8	27.1	29.9	30.8	51.5	131.3	168.1
West Virginia	23.8	26.2	23.5	25.4	36.9	65.8	105.0
East South Central	**14.0**	**20.5**	**19.3**	**20.7**	**59.3**	**111.1**	**159.6**
Alabama	6.8	7.3	12.7	13.9	87.0	150.0	203.9
Kentucky	23.7	24.4	23.6	24.6	54.0	58.0	94.7
Mississippi	9.6	18.8	17.3	18.4	49.6	114.6	160.0
Tennessee	12.8	17.5	19.0	19.9	43.0	164.0	170.0
West South Central	**8.7**	**13.1**	**14.6**	**16.7**	**45.6**	**90.8**	**116.7**
Arkansas	5.6	11.9	15.6	16.3	34.7	75.0	95.9
Louisiana	11.3	17.1	18.2	19.3	42.3	83.6	111.5
Oklahoma	7.4	11.9	13.8	15.6	32.0	90.2	112.4
Texas	8.0	11.3	12.9	14.4	51.9	99.5	123.4
Mountain	**8.9**	**11.2**	**12.1**	**14.3**	**38.2**	**92.0**	**129.4**
Arizona	0.0	0.0	12.1	17.1	28.0	37.0	41.3
Colorado	9.4	11.9	12.9	14.7	48.0	84.0	141.0
Idaho	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Montana	6.7	7.1	8.2	10.3	43.3	84.7	121.1
Nevada	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Mexico	8.6	10.7	11.8	14.3	40.5	98.8	136.6
Utah	13.9	18.0	12.5	15.1	48.0	64.3	71.6
Wyoming	8.5	12.0	13.5	14.7	33.7	79.3	113.0
Pacific	**22.2**	**26.7**	**30.8**	**31.0**	**56.7**	**102.7**	**115.0**
Alaska	0.0	12.2	24.8	24.6	30.2	52.1	51.8
California	22.2	26.7	30.9	32.1	70.0	135.7	170.5
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	0.0	0.0	0.0	0.0	0.0	0.0	213.0
Washington	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*Reflects price at first point of transfer, representing sales made by producers. The 1980 U.S. average wellhead price of natural gas is 149.6¢.
Source: Energy Information Administration, U.S. Department of Energy, *Natural Gas Annual*.

TABLE 94
GAS UTILITY INDUSTRY AVERAGE PRICES BY CLASS OF SERVICE, 1955-1980*

($/MMBtu)

Year	Total	Residential	Commercial	Industrial	Other
1955	$0.52	$0.90	$0.70	$0.27	$0.29
1956	0.53	0.91	0.72	0.28	0.29
1957	0.54	0.92	0.72	0.28	0.28
1958	0.57	0.94	0.75	0.30	0.29
1959	0.58	0.97	0.76	0.31	0.31
1960	0.60	1.00	0.79	0.33	0.33
1961	0.62	1.02	0.80	0.35	0.34
1962	0.63	1.02	0.80	0.35	0.34
1963	0.62	1.02	0.80	0.35	0.35
1964	0.62	1.01	0.78	0.35	0.36
1965	0.62	1.01	0.78	0.35	0.36
1966	0.61	1.00	0.78	0.35	0.36
1967	0.61	1.00	0.78	0.35	0.36
1968	0.61	1.00	0.77	0.35	0.36
1969	0.62	1.01	0.78	0.36	0.39
1970	0.64	1.06	0.81	0.38	0.41
1971	0.68	1.12	0.85	0.41	0.38
1972	0.73	1.19	0.91	0.45	0.41
1973	0.79	1.25	0.95	0.50	0.44
1974	0.95	1.42	1.11	0.66	0.60
1975	1.29	1.69	1.38	0.99	0.94
1976	1.60	1.98	1.68	1.32	1.15
1977	1.97	2.33	2.07	1.70	1.45
1978	2.18	2.53	2.28	1.91	1.50
1979	2.52	2.92	2.66	2.24	1.67
1980	3.13	3.61	3.34	2.81	2.25

*Excludes data for Alaska prior to 1961 and Hawaii prior to 1960.

TABLE 95
GAS UTILITY INDUSTRY AVERAGE PRICES, BY STATE AND CLASS OF SERVICE, 1980

($/MMBtu)

Division and State	Total	Class of Service			
		Residential	Commercial	Industrial[a]	Other
United States	**$3.13**	**$3.61**	**$3.34**	**$2.81**	**$2.25**
New England	**4.96**	**5.48**	**4.83**	**4.09**	**4.17**
Connecticut	4.99	5.73	4.72	4.09	4.25
Maine	5.15	6.34	5.12	4.29	b
Massachusetts	4.96	5.41	4.85	4.06	4.11
New Hampshire	4.23	4.53	4.28	3.48	4.22
Rhode Island	4.99	5.46	5.13	4.15	b
Vermont	5.66	6.43	6.00	4.93	4.92
Middle Atlantic	**3.99**	**4.44**	**3.99**	**3.36**	**3.83**
New Jersey	4.40	4.89	4.47	3.60	3.42
New York	4.43	4.86	4.14	3.70	3.93
Pennsylvania	3.45	3.74	3.54	3.14	3.65
East North Central	**3.17**	**3.37**	**3.18**	**2.92**	**3.01**
Illinois	3.26	3.46	3.19	3.04	2.41
Indiana	2.82	3.12	2.92	2.59	2.78
Michigan	3.06	3.15	3.14	2.87	4.61
Ohio	3.24	3.45	3.23	2.97	3.04
Wisconsin	3.42	3.80	3.43	3.12	3.14
West North Central	**2.67**	**3.08**	**2.72**	**2.34**	**1.73**
Iowa	2.81	3.20	2.85	2.51	3.34
Kansas	2.23	2.38	2.03	2.24	1.48
Minnesota	2.81	3.24	2.92	2.40	1.64
Missouri	3.04	3.37	2.98	2.51	2.19
Nebraska	2.34	2.71	2.32	2.07	2.00
North Dakota	3.57	3.83	3.34	3.59	2.47
South Dakota	2.81	3.11	2.76	2.34	1.96
South Atlantic	**3.26**	**4.13**	**3.45**	**2.78**	**2.59**
Delaware	3.46	4.15	3.77	3.04	1.56
District of Columbia	4.38	4.56	4.21	b	b
Florida	2.64	4.53	3.26	2.34	2.45
Georgia	3.18	4.06	3.06	2.67	3.13
Maryland	3.87	4.40	3.95	3.17	2.83
North Carolina	3.46	4.00	3.64	3.22	3.14
South Carolina	3.03	4.12	3.17	2.88	2.52
Virginia	3.58	4.24	3.71	2.91	3.02
West Virginia	3.26	3.61	3.20	3.01	2.76
East South Central	**2.86**	**3.37**	**3.07**	**2.60**	**2.50**
Alabama	3.13	4.11	3.30	2.72	2.43
Kentucky	2.90	3.08	2.97	2.67	2.66
Mississippi	2.70	3.38	3.04	2.52	2.57
Tennessee	2.69	2.94	2.99	2.53	1.96
West South Central	**2.53**	**2.99**	**2.69**	**2.49**	**1.62**
Arkansas	1.93	2.31	2.06	1.79	2.18
Louisiana	2.36	3.06	2.69	2.23	1.85
Oklahoma	2.04	2.35	2.19	1.96	1.22
Texas	2.72	3.30	2.95	2.70	1.59
Mountain	**2.84**	**3.23**	**3.02**	**2.54**	**2.80**
Arizona	2.81	3.72	2.90	2.45	2.54
Colorado	2.95	3.22	3.03	2.60	2.78
Idaho	4.03	4.94	4.33	3.70	b
Montana	3.03	2.88	2.93	3.17	3.80
Nevada	3.17	3.97	3.95	2.65	3.26
New Mexico	2.68	3.21	2.83	2.44	2.60
Utah	2.34	2.68	2.25	2.09	4.49
Wyoming	2.31	2.69	2.45	2.18	1.60
Pacific	**3.65**	**3.51**	**3.95**	**3.63**	**4.44**
Alaska	1.20	1.73	1.48	0.95	b
California	3.57	3.38	3.83	3.62	4.43
Hawaii	13.01	14.58	12.79	12.50	b
Oregon	4.64	5.36	4.91	4.20	b
Washington	4.33	4.91	4.48	4.00	4.49

a. Includes Electric Generation.
b. No sales reported.

TABLE 96
AVERAGE RESIDENTIAL GAS PRICES, BY STATE, 1955-1980

($/MMBtu)

Division and State	1955	1960	1965	1970	1975	1979	1980
United States	**$0.90**	**$1.00**	**$1.01**	**$1.06**	**$1.69**	**$2.92**	**$3.61**
New England	**2.35**	**2.08**	**1.89**	**1.88**	**3.22**	**4.55**	**5.48**
Connecticut	2.35	2.02	1.83	1.93	3.27	4.72	5.73
Maine	2.84	3.01	3.33	2.89	4.25	5.93	6.34
Massachusetts	2.30	2.11	1.91	1.87	3.20	4.58	5.41
New Hampshire	2.30	1.99	1.85	1.77	2.46	3.82	4.53
Rhode Island	2.54	1.92	1.80	1.76	3.16	4.25	5.46
Vermont	3.43	3.40	3.44	1.78	2.80	3.88	6.43
Middle Atlantic	**1.24**	**1.32**	**1.31**	**1.34**	**2.26**	**3.65**	**4.44**
New Jersey	1.87	1.79	1.69	1.62	2.59	4.16	4.89
New York	1.40	1.42	1.35	1.38	2.43	3.93	4.86
Pennsylvania	0.96	1.08	1.10	1.17	1.90	3.09	3.74
East North Central	**0.86**	**0.93**	**0.95**	**0.99**	**1.56**	**2.79**	**3.37**
Illinois	1.04	1.11	1.02	1.02	1.58	2.90	3.46
Indiana	1.04	0.98	0.96	1.05	1.45	2.65	3.12
Michigan	0.97	0.94	0.97	1.00	1.60	2.63	3.15
Ohio	0.64	0.76	0.83	0.89	1.51	2.78	3.45
Wisconsin	1.37	1.27	1.14	1.21	1.71	3.02	3.80
West North Central	**0.75**	**0.83**	**0.85**	**0.92**	**1.37**	**2.55**	**3.08**
Iowa	0.84	0.93	0.92	0.96	1.41	2.70	3.20
Kansas	0.54	0.57	0.60	0.69	0.97	1.85	2.38
Minnesota	0.90	1.11	1.05	1.08	1.59	2.89	3.24
Missouri	0.75	0.79	0.84	0.93	1.45	2.69	3.37
Nebraska	0.79	0.85	0.83	0.86	1.26	2.34	2.71
North Dakota	0.84	0.84	0.86	1.05	1.50	2.87	3.83
South Dakota	0.87	0.93	0.95	1.04	1.40	2.61	3.11
South Atlantic	**1.03**	**1.22**	**1.23**	**1.23**	**2.02**	**3.46**	**4.13**
Delaware	1.90	1.72	1.59	1.50	2.34	3.91	4.15
District of Columbia	1.39	1.53	1.47	1.44	2.40	3.74	4.56
Florida	2.54	2.76	2.51	1.81	2.78	3.70	4.53
Georgia	0.77	0.97	1.03	0.98	1.75	3.33	4.06
Maryland	1.37	1.48	1.39	1.43	2.31	3.75	4.40
North Carolina	1.90	1.41	1.38	1.29	2.02	3.49	4.00
South Carolina	2.00	1.43	1.39	1.34	2.08	3.39	4.12
Virginia	1.48	1.55	1.45	1.42	2.29	3.63	4.24
West Virginia	0.51	0.79	0.80	0.87	1.47	2.92	3.61
East South Central	**0.76**	**0.90**	**0.91**	**0.92**	**1.43**	**2.69**	**3.37**
Alabama	0.91	1.06	1.11	1.10	1.72	3.36	4.11
Kentucky	0.63	0.78	0.80	0.84	1.30	2.39	3.08
Mississippi	0.75	0.88	0.87	0.88	1.41	2.79	3.38
Tennessee	0.82	0.94	0.90	0.89	1.33	2.34	2.94
West South Central	**0.64**	**0.70**	**0.77**	**0.85**	**1.35**	**2.63**	**2.99**
Arkansas	0.58	0.66	0.75	0.78	1.12	2.01	2.31
Louisiana	0.61	0.64	0.72	0.75	1.32	2.57	3.06
Oklahoma	0.57	0.69	0.75	0.80	1.15	2.09	2.35
Texas	0.68	0.73	0.80	0.92	1.47	2.93	3.30
Mountain	**0.64**	**0.72**	**0.74**	**0.83**	**1.34**	**2.58**	**3.23**
Arizona	0.89	0.97	1.04	1.14	1.83	3.33	3.72
Colorado	0.64	0.67	0.67	0.71	1.16	2.49	3.22
Idaho	2.30	1.26	1.22	1.34	2.25	3.69	4.94
Montana	0.52	0.60	0.63	0.84	1.18	2.22	2.88
Nevada	1.66	1.47	1.30	1.31	1.81	2.94	3.97
New Mexico	0.68	0.74	0.71	0.84	1.37	2.64	3.21
Utah	0.56	0.63	0.64	0.70	1.12	2.13	2.68
Wyoming	0.52	0.59	0.61	0.65	0.99	2.49	2.69
Pacific	**0.74**	**0.91**	**0.91**	**0.97**	**1.58**	**2.50**	**3.51**
Alaska	*	*	1.48	1.42	1.48	1.87	1.73
California	0.72	0.88	0.87	0.93	1.52	2.38	3.38
Hawaii	*	3.65	3.74	3.56	7.97	10.83	14.58
Oregon	1.95	1.56	1.52	1.44	2.41	4.13	5.36
Washington	2.69	1.41	1.32	1.29	2.12	3.70	4.91

* Not available.

TABLE 97
GAS UTILITY INDUSTRY AVERAGE PRICES, BY STATE, 1955-1980[a]

($/MMBtu)

Division and State	1955	1960	1965	1970	1975	1979	1980
United States	**$0.52**	**$0.60**	**$0.62**	**$0.64**	**$1.29**	**$2.52**	**$3.13**
New England	**2.11**	**1.77**	**1.60**	**1.60**	**2.87**	**4.04**	**4.96**
Connecticut	1.98	1.66	1.51	1.60	2.93	4.15	4.99
Maine	2.53	2.78	2.96	2.23	3.04	4.56	5.15
Massachusetts	2.11	1.82	1.63	1.64	2.91	4.10	4.96
New Hampshire	2.19	1.71	1.71	1.54	2.21	3.51	4.23
Rhode Island	2.32	1.58	1.46	1.36	2.82	3.65	4.99
Vermont	3.45	3.49	2.93	2.22	2.06	3.62	5.66
Middle Atlantic	**1.01**	**1.07**	**1.04**	**1.06**	**1.97**	**3.27**	**3.99**
New Jersey	1.93	1.53	1.38	1.26	2.31	3.78	4.40
New York	1.32	1.29	1.20	1.21	2.14	3.57	4.43
Pennsylvania	0.72	0.81	0.81	0.87	1.68	2.81	3.45
East North Central	**0.66**	**0.74**	**0.73**	**0.74**	**1.34**	**2.59**	**3.17**
Illinois	0.61	0.77	0.74	0.73	1.35	2.72	3.26
Indiana	0.69	0.66	0.63	0.71	1.16	2.38	2.82
Michigan	0.86	0.81	0.80	0.78	1.43	2.51	3.06
Ohio	0.57	0.68	0.70	0.73	1.35	2.57	3.24
Wisconsin	1.15	1.02	0.82	0.80	1.31	2.66	3.42
West North Central	**0.47**	**0.52**	**0.53**	**0.56**	**1.00**	**2.20**	**2.67**
Iowa	0.54	0.61	0.62	0.62	1.04	2.36	2.81
Kansas	0.31	0.33	0.36	0.39	0.69	1.72	2.23
Minnesota	0.62	0.71	0.68	0.67	1.19	2.50	2.81
Missouri	0.51	0.56	0.56	0.54	1.18	2.40	3.04
Nebraska	0.48	0.52	0.51	0.51	0.90	2.00	2.34
North Dakota	0.68	0.67	0.68	0.82	1.26	2.66	3.57
South Dakota	0.52	0.58	0.65	0.71	1.05	2.38	2.81
South Atlantic	**0.64**	**0.73**	**0.72**	**0.72**	**1.39**	**2.63**	**3.26**
Delaware	1.69	1.14	0.96	0.93	1.73	3.12	3.46
District of Columbia	1.33	1.45	1.36	1.28	2.21	3.58	4.38
Florida	0.65	0.52	0.51	0.55	1.15	2.09	2.64
Georgia	0.40	0.55	0.61	0.57	1.12	2.58	3.18
Maryland	1.24	1.32	1.17	1.13	1.97	3.18	3.87
North Carolina	0.95	0.74	0.74	0.70	1.58	2.90	3.46
South Carolina	0.60	0.57	0.58	0.62	1.10	2.21	3.03
Virginia	0.98	1.05	0.98	0.95	1.78	3.00	3.58
West Virginia	0.43	0.60	0.59	0.64	1.24	2.60	3.26
East South Central	**0.39**	**0.52**	**0.50**	**0.51**	**1.03**	**2.30**	**2.86**
Alabama	0.38	0.52	0.51	0.52	1.04	2.48	3.13
Kentucky	0.53	0.63	0.64	0.67	1.11	2.23	2.90
Mississippi	0.29	0.41	0.39	0.38	0.95	2.28	2.70
Tennessee	0.43	0.54	0.50	0.53	1.00	2.19	2.69
West South Central	**0.23**	**0.29**	**0.32**	**0.35**	**0.99**	**2.17**	**2.53**
Arkansas	0.24	0.33	0.36	0.37	0.80	1.69	1.93
Louisiana	0.20	0.26	0.28	0.30	0.85	2.02	2.36
Oklahoma	0.31	0.35	0.40	0.46	0.79	1.78	2.04
Texas	0.23	0.28	0.31	0.35	1.10	2.36	2.72
Mountain	**0.38**	**0.43**	**0.46**	**0.49**	**0.99**	**2.26**	**2.84**
Arizona	0.39	0.47	0.52	0.57	1.19	2.45	2.81
Colorado	0.40	0.43	0.45	0.48	0.90	2.27	2.95
Idaho	b	0.53	0.57	0.67	1.48	2.83	4.03
Montana	0.36	0.43	0.47	0.54	1.03	2.15	3.03
Nevada	0.86	0.62	0.59	0.58	1.30	2.54	3.17
New Mexico	0.33	0.34	0.41	0.42	0.88	2.20	2.68
Utah	0.38	0.44	0.43	0.46	0.85	1.84	2.34
Wyoming	0.36	0.36	0.38	0.34	0.70	1.99	2.31
Pacific	**0.50**	**0.59**	**0.57**	**0.58**	**1.31**	**2.54**	**3.65**
Alaska	b	b	0.88	0.70	0.81	1.21	1.20
California	0.48	0.59	0.55	0.56	1.26	2.45	3.57
Hawaii	b	3.13	3.03	2.76	6.78	9.34	13.01
Oregon	1.94	0.78	0.71	0.74	1.80	3.33	4.64
Washington	2.46	0.59	0.60	0.65	1.55	3.10	4.33

a. Excludes sales for resale and revenues from sale for resale.
b. Not available.

TABLE 92

AVERAGE CONSUMER PRICE INDEXES, 1955-1980[a]

(1967 = 100)

Year	All Items	Total Food	Apparel[b] and Upkeep	Shelter[c]	Gas and Electricity	Fuel Oil[d] and Coal	House Furnishing[e] and Operation	Trans-portation	Medical Care	Personal Care	Reading and Recreation	Other Goods and Services[f]
1955	80.2	81.6	84.8	79.1	87.5	82.4	99.2	77.4	64.8	77.9	76.7	79.8
1956	81.4	82.2	86.3	80.4	88.4	85.9	98.1	78.8	67.2	81.1	77.8	81.0
1957	84.3	84.9	87.5	83.4	89.3	90.3	99.7	83.3	69.9	84.1	80.7	83.3
1958	86.6	88.5	87.6	85.1	92.4	88.7	99.0	86.0	73.2	86.9	83.9	84.4
1959	87.3	87.0	88.3	86.0	94.8	89.8	99.0	89.6	76.4	88.7	85.3	86.1
1960	88.6	88.0	89.6	87.8	98.6	89.2	99.3	89.6	79.1	90.1	87.3	87.8
1961	89.6	89.1	90.2	88.5	99.4	91.0	98.7	90.6	81.4	90.6	89.3	88.5
1962	90.6	89.9	90.5	89.6	99.4	91.5	98.1	92.5	83.5	92.2	91.3	89.1
1963	91.7	91.2	91.9	90.7	99.4	93.2	97.7	93.0	85.6	93.4	92.8	90.6
1964	92.2	92.4	92.7	92.2	99.4	92.7	97.6	94.3	87.3	94.6	95.0	92.0
1965	94.5	94.4	93.7	93.8	99.4	94.6	97.1	95.9	89.5	95.2	94.2	
1966	97.2	99.1	96.1	96.8	99.6	97.0	98.0	97.2	97.1	97.5	97.2	
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.6	105.4	104.8	100.9	103.1	103.9	103.2	106.1	104.2	104.7	104.6
1969	109.8	108.9	111.5	113.3	102.8	105.6	109.0	107.2	113.4	109.3	108.7	110.3
1970	116.3	114.9	116.1	123.6	107.3	110.1	113.4	112.7	120.6	113.2	113.4	116.2
1971	121.3	118.4	119.8	128.8	114.7	117.5	118.1	118.6	128.4	116.8	119.3	122.2
1972	125.3	123.5	122.3	134.5	120.5	118.5	121.0	119.9	132.5	119.8	122.8	126.1
1973	133.1	141.4	126.8	140.7	126.4	136.0	124.9	123.8	137.7	125.2	125.9	129.0
1974	147.7	161.7	136.2	154.4	145.8	214.6	140.5	137.7	150.5	138.3	133.8	137.2
1975	161.2	175.4	142.3	169.7	169.6	235.3	158.1	150.6	168.6	150.7	144.4	147.4
1976	170.5	180.8	147.6	179.0	189.0	250.8	168.5	165.5	184.7	160.5	151.2	153.3
1977	181.5	192.2	154.2	191.1	213.4	283.4	177.0	177.2	202.4	170.9	157.9	159.2
1978	195.3	211.2	159.5	210.3	232.6	298.3	177.0	185.8	219.4	182.0	g	183.2
1979	217.7	234.7	166.4	240.3	257.6	403.6	188.9	212.8	240.1	195.5	g	196.3
1980	247.0	255.3	177.4	283.1	301.2	557.2	202.9	250.5	267.2	212.7	g	213.6

a. Applicable to "wage-earners and clerical workers in urban United States."
b. Includes apparel only prior to June 1964.
c. Includes hotel and motel rates.
d. Starting in 1978 includes bottled gas.
e. Includes house furnishings only prior to 1969.
f. Prior to 1978 included alcoholic beverages, now found in food and beverages; now includes personal care and education – related expenses, formerly found in health and recreation.
g. Not available.
Source: Bureau of Labor Statistics. *The Consumer Price Index.*

GAS FACTS

TABLE 98
AVERAGE GAS PRICES OF WELLHEAD, CITY GATE, AND END-USER LEVEL
1955-1980

Year	Wellhead ($/Mcf*)	City Gate ($/MMBtu*)	Cost to the Ultimate Customer ($/MMBtu*)
1955	0.104	0.271	0.518
1956	0.108	0.275	0.531
1957	0.113	0.284	0.536
1958	0.119	0.306	0.569
1959	0.129	0.316	0.576
1960	0.140	0.342	0.605
1961	0.151	0.357	0.618
1962	0.155	0.360	0.630
1963	0.158	0.351	0.625
1964	0.154	0.342	0.615
1965	0.156	0.339	0.618
1966	0.157	0.333	0.612
1967	0.160	0.330	0.612
1968	0.164	0.328	0.607
1969	0.167	0.334	0.616
1970	0.171	0.354	0.641
1971	0.182	0.389	0.681
1972	0.186	0.429	0.730
1973	0.216	0.463	0.788
1974	0.304	0.573	0.953
1975	0.445	0.798	1.283
1976	0.580	0.984	1.599
1977	0.790	1.308	1.974
1978	0.905	1.466	2.184
1979	1.178	1.812	2.522
1980	1.496	2.413	3.133

*Mcf and MMBtu prices are roughly comparable. On a MMBtu basis, the wellhead price would be slightly less.
Source: For wellhead price, Monthly Energy Review.

PRICES

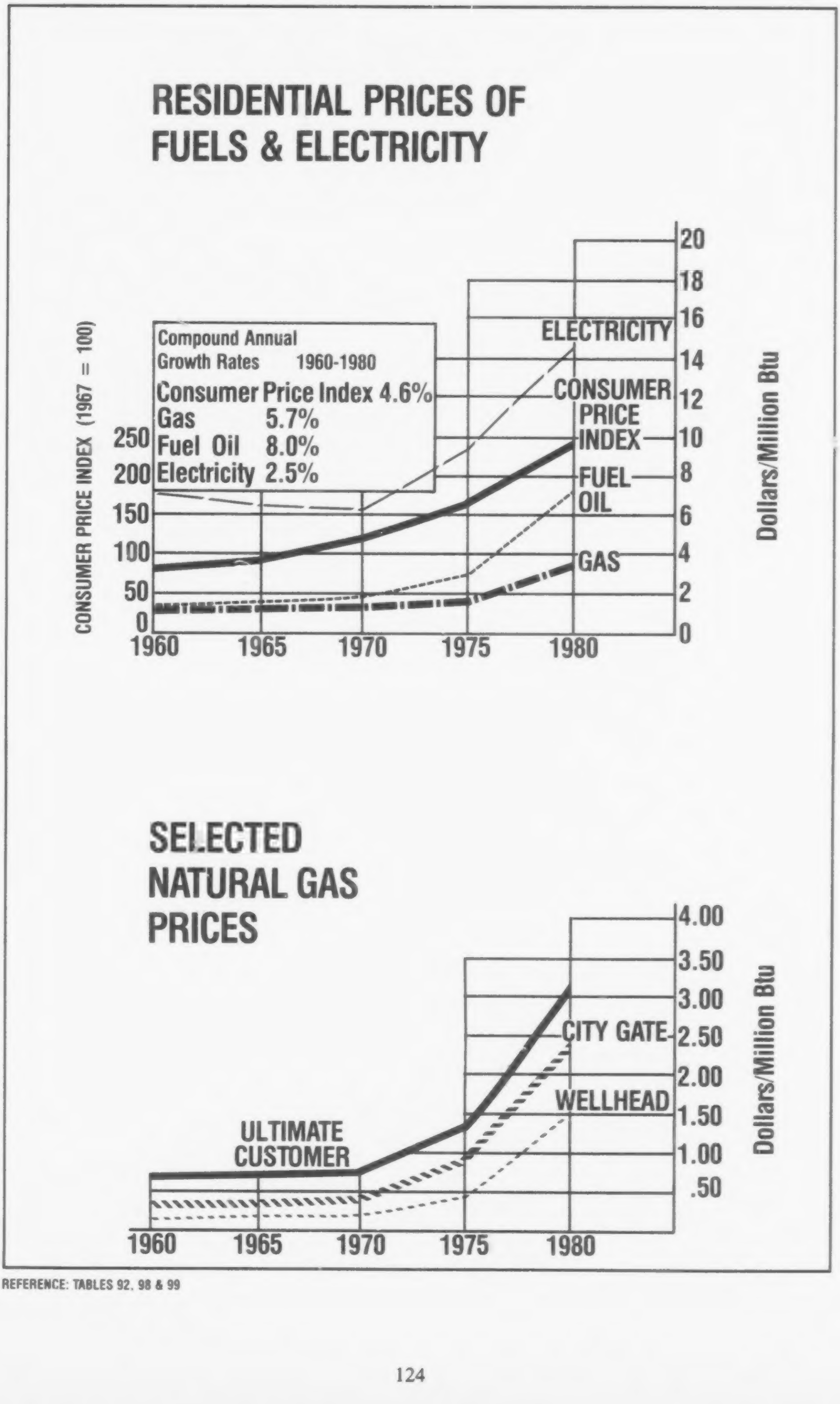
TABLE 99
AVERAGE RESIDENTIAL CONSUMPTION AND COSTS
1955-1980*

	Gas				
Year	Consumption (MM Btu/ Customer)	Annual Bill ($/Customer)	Price ($/MMBtu)	Electric Price ($/MMBtu)	Number 2 Fuel Oil Price ($/MMBtu)
1955	85.2	$ 76.38	$0.90	$ 7.77	$1.04
1956	90.5	82.10	0.91	7.65	1.10
1957	92.5	84.66	0.92	7.50	1.15
1958	97.7	92.32	0.94	7.44	1.08
1959	100.7	97.21	0.97	7.36	1.10
1960	104.8	104.46	1.00	7.24	1.08
1961	106.7	108.51	1.02	7.18	1.12
1962	110.9	112.98	1.02	7.06	1.13
1963	112.1	113.96	1.02	6.95	1.15
1964	115.3	116.09	1.01	6.77	1.12
1965	116.5	117.34	1.01	6.59	1.15
1966	118.8	119.38	1.00	6.45	1.18
1967	121.5	122.03	1.00	6.36	1.21
1968	124.1	124.48	1.00	6.21	1.25
1969	128.4	130.08	1.01	6.13	1.28
1970	129.2	136.69	1.06	6.15	1.33
1971	129.9	145.28	1.12	6.42	1.41
1972	130.4	154.56	1.19	6.71	1.42
1973	124.5	155.73	1.25	6.98	1.64
1974	119.6	169.82	1.42	8.29	2.60
1975	121.9	206.24	1.69	9.40	2.81
1976	121.3	240.48	1.98	10.11	3.01
1977	118.7	276.87	2.33	11.08	3.42
1978	121.0	307.40	2.53	11.81	3.66
1979	118.6	346.39	2.92	12.69	5.24
1980	111.4	401.96	3.61	14.45	7.21

* Prices given are for total usage.

Sources: For electric price, *Edison Electric Institute Statistical Yearbook*. For oil price, Bureau of Labor Statistics, *Retail Prices* and *Indexes of Fuels and Utilities*.

CHART 17



RESIDENTIAL PRICES OF FUELS & ELECTRICITY

SELECTED NATURAL GAS PRICES

REFERENCE: TABLES 92, 98 & 99

TABLE 100
AVERAGE ANNUAL RESIDENTIAL GAS BILLS, BY STATE, 1955-1980

($/Customer)

Division and State	1955	1960	1965	1970	1975	1979	1980
United States	**$ 76**	**$104**	**$117**	**$137**	**$206**	**$346**	**$402**
New England	**68**	**103**	**128**	**162**	**274**	**398**	**493**
Connecticut	69	109	125	169	285	414	504
Maine	70	88	107	110	165	228	275
Massachusetts	69	106	132	163	276	401	494
New Hampshire	68	102	137	165	234	322	458
Rhode Island	59	91	117	146	266	380	474
Vermont	52	68	80	116	261	422	660
Middle Atlantic	**73**	**103**	**119**	**144**	**231**	**377**	**465**
New Jersey	68	102	124	150	229	361	439
New York	64	90	105	126	217	359	455
Pennsylvania	94	127	142	172	257	421	503
East North Central	**88**	**128**	**151**	**174**	**257**	**468**	**535**
Illinois	76	122	143	169	266	510	562
Indiana	75	101	128	168	220	411	448
Michigan	98	138	168	189	268	464	545
Ohio	102	140	157	172	259	465	547
Wisconsin	78	117	148	175	238	414	497
West North Central	**97**	**126**	**135**	**154**	**209**	**382**	**405**
Iowa	99	138	148	161	215	394	408
Kansas	80	90	93	114	145	270	301
Minnesota	113	161	176	190	255	451	450
Missouri	93	118	127	155	215	399	449
Nebraska	110	136	134	145	195	356	349
North Dakota	80	100	142	179	245	457	489
South Dakota	109	135	150	159	203	369	365
South Atlantic	**81**	**113**	**118**	**136**	**194**	**331**	**387**
Delaware	71	110	136	164	219	374	388
District of Columbia	95	122	129	147	230	381	472
Florida	59	54	68	87	107	173	203
Georgia	75	107	106	122	181	327	394
Maryland	86	125	133	158	225	369	425
North Carolina	78	110	124	144	188	342	388
South Carolina	72	98	105	122	151	270	308
Virginia	93	129	137	157	230	366	423
West Virginia	79	129	128	140	219	397	474
East South Central	**80**	**106**	**101**	**116**	**153**	**289**	**344**
Alabama	79	103	101	118	157	296	356
Kentucky	86	120	116	132	177	331	401
Mississippi	65	86	77	92	122	248	291
Tennessee	86	111	103	113	140	257	299
West South Central	**53**	**68**	**71**	**89**	**130**	**242**	**253**
Arkansas	61	81	85	103	128	210	221
Louisiana	46	56	59	72	108	219	237
Oklahoma	62	79	87	102	138	242	243
Texas	52	67	69	89	135	255	265
Mountain	**85**	**99**	**104**	**117**	**175**	**302**	**334**
Arizona	61	73	80	89	141	219	219
Colorado	95	100	103	111	171	336	385
Idaho	77	127	143	154	249	347	393
Montana	96	106	126	148	203	344	363
Nevada	103	130	134	148	204	285	347
New Mexico	77	99	96	109	173	288	318
Utah	98	127	128	148	201	324	373
Wyoming	99	102	106	117	160	374	362
Pacific	**67**	**84**	**94**	**103**	**174**	**232**	**286**
Alaska	*	*	341	282	328	377	375
California	66	82	92	97	166	218	272
Hawaii	*	92	102	120	232	283	364
Oregon	98	123	138	163	258	373	428
Washington	90	132	152	165	259	403	469

*Not available.

TABLE 101
AVERAGE RESIDENTIAL GAS PRICES BY CENSUS DIVISION
HEATING SEASON – NOVEMBER THRU MARCH

($/MMBtu)

	1976-77	1977-78	1978-79	1979-80	1980-81*
Total U.S.	2.10	2.35	2.62	3.28	3.84
NE	3.80	3.91	4.07	4.98	5.71
MA	2.59	3.02	3.35	3.94	4.67
ENC	2.02	2.25	2.44	3.14	3.52
WNC	1.72	1.97	2.42	2.75	3.46
SA	2.38	2.74	2.98	3.92	4.27
ESC	1.72	2.04	2.41	3.09	3.57
WSC	1.97	2.15	2.35	2.91	3.23
M	1.76	2.02	2.34	2.98	3.79
P	1.82	1.89	2.20	2.98	3.59

*Data used for 1981 was based on the "Quarterly Report of Gas Industry Operations."

TABLE 102
AVERAGE GAS CONSUMPTION BY HOUSEHEATING CUSTOMERS BY CENSUS DIVISION
HEATING SEASON – NOVEMBER THRU MARCH

(MMBtu/Customer)

	1976-77	1977-78	1978-79	1979-80	1980-81*
Total U.S.	97.5	94.7	93.8	83.3	81.4
NE	100.3	96.9	95.2	93.9	92.5
MA	125.9	120.9	111.7	107.4	113.6
ENC	130.8	125.8	128.0	112.9	115.1
WNC	119.2	118.2	113.5	105.3	87.5
SA	90.4	88.8	76.2	71.0	74.1
ESC	93.8	90.5	86.4	75.1	71.5
WSC	67.8	72.0	66.5	53.7	55.5
M	78.3	74.5	84.9	76.0	59.2
P	56.7	51.1	64.3	50.7	45.6

*Data used for 1981 was based on the "Quarterly Report of Gas Industry Operations."

TABLE 103
AVERAGE GAS BILL FOR HOUSEHEATING CUSTOMERS BY CENSUS DIVISION
HEATING SEASON – NOVEMBER THRU MARCH

($/Customer)

	1976-77	1977-78	1978-79	1979-80	1980-81*
Total U.S.	205	223	246	273	313
NE	381	379	387	468	528
MA	326	365	374	423	531
ENC	264	283	312	355	405
WNC	197	233	275	290	303
SA	215	243	227	278	316
ESC	161	185	208	232	255
WSC	134	155	156	156	179
M	138	150	199	226	224
P	103	97	141	151	164

*Data used for 1981 was based on the "Quarterly Report of Gas Industry Operations."

TABLE 104
GAS UTILITY INDUSTRY AVERAGE PRICES, FOR GAS USED FOR ELECTRIC GENERATION, BY STATE, 1974-1980

($/MMBtu)

Division and State	1974	1975	1976	1977	1978	1979	1980
United States	**$0.53**	**$0.86**	**$1.26**	**$1.65**	**$1.78**	**$2.18**	**$2.70**
New England	**1.40**	**1.13**	**1.52**	**1.87**	**2.41**	**2.65**	**3.47**
Connecticut	0.68	1.08	1.11	b	b	b	b
Maine	b	b	b	b	b	b	b
Massachusetts	1.40	1.21	1.58	1.90	1.88	2.69	3.48
New Hampshire	b	0.94	1.44	1.50	b	b	b
Rhode Island	1.63	1.58	b	b	2.04	2.49	3.42
Vermont	b	b	b	b	b	b	b
Middle Atlantic	**0.83**	**1.16**	**1.22**	**1.54**	**1.64**	**2.69**	**3.39**
New Jersey	0.67	1.07	1.17	1.68	1.83	2.84	3.39
New York	0.96	0.99	1.40	1.54	1.55	2.36	2.78
Pennsylvania	0.93	1.26	1.32	1.59	1.63	2.58	3.20
East North Central	**0.78**	**1.24**	**1.65**	**2.00**	**2.24**	**2.33**	**2.99**
Illinois	0.78	1.16	1.40	1.74	2.70	2.61	3.26
Indiana	0.68	0.97	1.54	2.02	2.40	2.09	3.71
Michigan	0.91	1.50	1.88	2.07	1.99	2.10	2.84
Ohio	0.73	1.20	1.02	1.31	1.31	2.24	2.86
Wisconsin	0.58	0.80	1.24	1.91	2.20	2.29	2.89
West North Central	**0.43**	**0.59**	**0.79**	**1.07**	**1.16**	**1.43**	**2.02**
Iowa	0.51	0.70	0.87	1.23	1.66	2.00	2.40
Kansas	0.38	0.53	0.78	1.05	1.16	1.45	1.83
Minnesota	0.50	0.64	0.84	1.18	1.69	1.80	2.27
Missouri	0.41	0.57	0.76	1.09	1.12	1.43	2.34
Nebraska	0.49	0.63	0.82	1.07	1.13	1.17	1.85
North Dakota	b	b	b	b	b	b	b
South Dakota	0.50	0.63	0.87	1.11	1.30	1.45	b
South Atlantic	**0.57**	**0.64**	**0.76**	**0.97**	**1.27**	**2.16**	**2.29**
Delaware	b	b	b	b	b	b	3.27
District of Columbia	b	b	b	b	b	b	b
Florida	0.54	0.58	0.68	0.93	1.15	2.15	2.21
Georgia	0.55	0.65	0.81	1.15	1.60	2.17	2.57
Maryland	b	b	b	b	b	b	b
North Carolina	0.93	b	b	b	b	2.82	3.47
South Carolina	0.93	b	b	b	b	2.92	3.48
Virginia	0.48	0.64	0.92	b	b	b	b
West Virginia	b	b	1.27	1.62	b	b	b
East South Central	**0.48**	**0.72**	**0.98**	**1.29**	**1.53**	**1.91**	**2.29**
Alabama	0.48	0.82	1.12	1.47	1.63	b	b
Kentucky	b	b	b	b	b	b	b
Mississippi	0.48	0.72	0.98	1.29	1.52	1.91	2.29
Tennessee	b	b	b	b	b	b	2.30
West South Central	**0.47**	**0.86**	**1.27**	**1.61**	**1.79**	**2.14**	**2.46**
Arkansas	0.43	0.66	0.80	1.10	1.20	1.13	1.13
Louisiana	0.31	0.70	1.06	1.41	1.59	2.03	2.39
Oklahoma	0.44	0.66	1.02	1.40	1.47	1.61	1.82
Texas	0.52	0.97	1.40	1.71	1.94	2.35	2.62
Mountain	**0.50**	**0.72**	**0.95**	**1.35**	**1.45**	**2.06**	**2.43**
Arizona	0.53	0.81	0.82	1.10	1.38	1.88	2.26
Colorado	0.43	0.60	0.79	1.07	1.31	2.00	2.63
Idaho	0.49	b	b	b	b	b	b
Montana	0.41	b	b	b	b	b	1.66
Nevada	0.68	1.07	1.42	1.73	1.62	2.36	2.61
New Mexico	0.45	0.63	0.87	1.40	1.55	1.97	2.30
Utah	0.40	0.58	0.92	1.04	1.26	1.53	b
Wyoming	b	b	b	b	b	b	b
Pacific	**0.59**	**1.03**	**1.53**	**2.06**	**2.14**	**2.40**	**3.45**
Alaska	0.39	0.51	0.66	0.76	0.88	0.85	0.88
California	0.59	1.05	1.56	2.10	2.18	2.44	3.53
Hawaii	b	b	b	b	b	b	b
Oregon	0.82	b	b	b	b	b	5.56
Washington	b	b	b	b	2.20	3.05	b

a. Not available.
b. No sales reported.

TABLE 105
GAS UTILITY INDUSTRY RESALE[a] PRICES BY STATE, 1970-1980

($/MMBtu)

Division and State	1970	1975	1977	1978	1979	1980
United States	**$0.37**	**$0.80**	**$1.31**	**$1.47**	**$1.81**	**$2.41**
New England	**0.62**	**1.41**	**1.86**	**1.92**	**2.25**	**2.84**
Connecticut	0.63	1.51	1.97	2.03	2.31	2.91
Maine	b	b	b	b	b	b
Massachusetts	0.61	1.35	1.81	1.87	2.23	2.81
New Hampshire	0.62	0.99	1.55	1.78	2.14	2.59
Rhode Island	0.59	1.59	1.95	1.94	2.26	2.94
Vermont	b	0.67	0.91	b	b	b
Middle Atlantic	**0.43**	**0.93**	**1.38**	**1.51**	**1.86**	**2.49**
New Jersey	0.44	0.99	1.41	1.47	1.78	2.45
New York	0.46	0.93	1.41	1.55	1.98	2.59
Pennsylvania	0.41	0.90	1.36	1.50	1.82	2.45
East North Central	**0.37**	**0.79**	**1.32**	**1.44**	**1.80**	**2.41**
Illinois	0.31	0.68	1.13	1.22	1.64	2.12
Indiana	0.37	0.72	1.22	1.27	1.72	2.14
Michigan	0.40	0.87	1.50	1.67	2.03	2.93
Ohio	0.39	0.84	1.35	1.48	1.78	2.39
Wisconsin	0.41	0.95	1.72	1.82	2.18	3.07
West North Central	**0.34**	**0.70**	**1.19**	**1.36**	**1.69**	**2.11**
Iowa	0.39	0.78	1.33	1.56	1.93	2.48
Kansas	0.26	0.53	0.95	1.04	1.29	1.78
Minnesota	0.37	0.75	1.24	1.47	1.91	2.32
Missouri	0.32	0.69	1.19	1.31	1.58	1.86
Nebraska	0.34	0.69	1.13	1.34	1.62	2.02
North Dakota	0.42	1.40	2.27	2.33	2.78	4.57
South Dakota	0.37	0.72	1.20	1.44	1.74	2.11
South Atlantic	**0.39**	**0.80**	**1.28**	**1.51**	**1.85**	**2.43**
Delaware	0.62	0.98	1.36	1.61	1.83	2.41
District of Columbia	b	b	b	b	b	b
Florida	0.38	0.66	1.07	1.25	1.62	2.31
Georgia	0.37	0.69	1.13	1.37	1.88	2.30
Maryland	0.45	1.05	1.55	1.74	1.89	2.61
North Carolina	0.24	0.81	1.28	1.54	1.89	2.66
South Carolina	0.45	0.68	1.12	1.35	1.81	2.28
Virginia	0.42	0.98	1.50	1.79	1.91	2.60
West Virginia	0.36	0.76	1.26	1.47	1.83	2.35
East South Central	**0.32**	**0.64**	**1.09**	**1.29**	**1.58**	**2.14**
Alabama	0.33	0.64	1.06	1.30	1.82	2.25
Kentucky	0.37	0.71	1.16	1.30	1.66	2.22
Mississippi	0.27	0.62	1.11	1.29	1.34	2.19
Tennessee	0.29	0.61	1.05	1.27	1.59	2.04
West South Central	**0.21**	**0.63**	**1.21**	**1.37**	**1.66**	**2.15**
Arkansas	0.30	0.58	0.95	1.05	1.29	2.04
Louisiana	0.22	0.62	1.12	1.30	1.70	2.09
Oklahoma	0.20	0.62	1.25	1.32	1.52	2.04
Texas	0.20	0.64	1.29	1.49	1.67	2.21
Mountain	**0.32**	**0.71**	**1.15**	**1.38**	**1.74**	**2.37**
Arizona	0.33	0.70	1.09	1.32	1.74	2.26
Colorado	0.26	0.58	1.09	1.37	1.46	2.51
Idaho	0.34	1.14	1.74	2.02	2.33	3.43
Montana	0.46	0.95	1.79	1.74	1.99	3.41
Nevada	0.51	1.28	1.95	2.17	2.81	3.64
New Mexico	0.20	0.48	0.96	1.27	1.59	1.91
Utah	0.20	0.42	0.68	0.81	1.20	1.51
Wyoming	0.23	0.97	1.53	1.73	2.17	3.00
Pacific	**0.34**	**1.10**	**1.79**	**1.95**	**2.39**	**3.39**
Alaska	b	b	b	b	b	0.83
California	0.37	0.85	1.42	1.54	2.08	2.75
Hawaii	b	b	b	b	b	b
Oregon	0.30	1.27	2.03	2.24	2.65	4.29
Washington	0.32	1.11	1.76	1.98	2.34	3.40

a. Resale prices approximate city-gate prices.
b. No sales reported.

TABLE 106
INDEXES OF WHOLESALE PRICES OF GAS, YEARLY AVERAGES, 1955-1980 AND MONTHLY AVERAGES, 1980

(1967 = 100)

Year and Month		All Gas	Utility Gas	Liquefied Petroleum Gas
1955		61.6	61.1	64.1
1956		65.9	63.5	80.1
1957	December*	72.8	71.7	78.3
1958		76.1	75.2	80.4
1959		82.9	83.2	82.6
1960		87.2	90.5	73.2
1961		88.8	94.9	58.7
1962		89.2	96.8	52.2
1963		91.8	97.5	69.6
1964		90.7	97.7	56.5
1965		92.8	97.8	69.2
1966		96.7	98.6	89.1
1967		100.0	100.0	100.0
1968		91.3	101.9	60.2
1969		93.1	103.0	63.7
1970		103.0	105.6	96.3
1971		108.0	112.2	95.7
1972		114.1	121.0	93.7
1973		126.7	131.3	113.2
1974		162.2	154.6	183.5
1975		216.7	215.3	221.0
1976		286.8	291.8	287.7
1977		387.8	412.3	367.9
1978		428.6	488.2	343.5
1979		544.4	637.6	406.9
1980		760.4	846.6	642.2
	January	677.5	736.9	600.6
	February	716.6	780.2	633.8
	March	716.6	778.1	637.2
	April	730.1	799.2	638.7
	May	745.1	815.9	651.3
	June	749.2	824.2	648.7
	July	762.1	846.6	645.9
	August	772.6	868.9	637.3
	September	785.3	893.2	633.4
	October	801.1	918.3	634.8
	November	826.5	943.3	656.1
	December	841.8	954.3	688.5

*1957 yearly average not available.

Source: Bureau of Labor Statistics. *Wholesale Prices and Price Index*. Represents unofficial estimates of U.S. Bureau of Labor Statistics, based on Bureau of Mines wellhead prices of natural gas and average prices of L.P.G. between 1947 and 1956; and wellhead prices for natural gas by 20 major pipeline companies, and L.P.G. price quotations from 2 major producers subsequent to 1956.

SECTION XI
APPLIANCE AND HOUSING DATA

	1980	% Change 80/79
Manufacturer Shipments		
(Thousands of Units)		
Central Heating	1,739	−16.6
Ranges	1,435	−14.1
Water Heaters	2,818	− 2.4
Clothes Dryers	682	− 9.9
New One-Family Houses Completed		
(Gas Heat)	393	−23.2

TABLE 107

MANUFACTURER SHIPMENTS OF GAS RANGES, WATER HEATERS AND CLOTHES DRYERS, 1955-1980^{a}

(Thousands of units)

Year	Domestic Range Sales			Automatic Domestic Water Heater Sales			Automatic Gas Dryers
	Free-Standing^{b}	Built-in^{b}	Total	Natural Gas	L.P. Gas	Total	
1955	2,235	100	2,335	2,400	348	2,748	368^{c}
1960	1,475	339	1,814	2,383	338	2,721	431
1961	1,484	346	1,830	2,448	284	2,732	412
1962	1,621	360	1,981	2,588	288	2,876	475
1963	1,714	358	2,072	2,346	251	2,597	535
1964	1,826	345	2,171	2,482	242	2,724	632
1965	1,976	291	2,267	2,497	240	2,737	710
1966	1,931	232	2,163	2,341	296	2,637	751
1967	1,954	169	2,123	2,246	309	2,555	829
1968	2,102	184	2,286	2,411	345	2,756	876
1969	2,282	189	2,471	2,386	356	2,742	905
1970	2,195	167	2,362	2,404	381	2,785	852
1971	2,363	186	2,549	2,645	443	3,088	847
1972	2,467	194	2,661	2,676	487	3,163	936
1973	2,312	169	2,481	2,568	512	3,080	926
1974	1,825	125	1,950	2,210	359	2,569	739
1975	1,493	125	1,618	2,388	257	2,645	672
1976	1,693	131	1,824	2,695	417	3,112	707
1977	1,615	131	1,746	d	d	d	736
1978	1,665	129	1,794	2,578^{e}	343^{e}	2,921^{e}	757
1979	1,542	129	1,670	2,548^{e}	339^{e}	2,887^{e}	757
1980	1,333	102	1,435	2,443^{e}	375^{e}	2,818^{e}	682

a. Shows shipments by manufacturers, expanded from returns of reporting companies to represent industry-wide coverage. Shipments of appliances for L.P. gas users include those for use by customers obtaining such gas through utility mains, as well as bottled gas users.

b. Data for "Set-In" type ranges now included with "Free-Standing." Prior years have been added to provide comparability.

c. Includes combination washer-dryers.

d. Not available.

e – Estimated.

Source: Gas Appliance Manufacturers Association. *Statistical Highlights.*

TABLE 108
MANUFACTURER SHIPMENTS OF GAS HEATING EQUIPMENT, 1955-1980[a]

(Thousands of units)

Year	Central Heating Equipment				Floor and Wall Furnaces Total	Direct Heating Equipment Total
	Warm Air Furnaces	Conversion Burners	Boilers	Total		
1955	836	209	90	1,135	555	1,470
1960	900	132	153	1,185	453	1,211
1961	929	116	168	1,213	467	1,067
1962	1,009	104	175	1,288	515	1,161
1963	1,102	108	184	1,394	525	1,324
1964	1,186	101	199	1,486	555	1,190
1965	1,238	93	200	1,531	501	994
1966	1,213	93	186	1,492	515	1,034
1967	1,146	84	174	1,404	471	920
1968	1,428	79	187	1,694	555	974
1969	1,546	77	176	1,799	576	1,043
1970	1,471	66	164	1,701	545	781
1971	1,795	53	157	2,005	612	783
1972	2,066	40	156	2,262	762	708
1973	1,719	43	147	1,909	652	678
1974	1,476	89	123	1,688	409	488
1975	1,186	39	88	1,313	435	332
1976	1,554	26	113	1,693	523	306
1977	1,508	b	113	1,621	499	193
1978	1,636	b	126	1,762	532	175
1979	1,863	b	221	2,084	376	193
1980	1,416	b	293	1,739	199	124

a. Shows shipments by manufacturers: expanded from returns of reporting companies to represent industry-wide coverage. Includes shipments for use by utility customers and bottled gas users.
b. Not available.
Source: Gas Appliance Manufacturers Association. *Statistical Highlights*.

TABLE 109
MANUFACTURER SHIPMENTS OF RESIDENTIAL GAS APPLIANCES, BY MONTH, 1980

(Thousands of units)

Month	Ranges		Automatic Water Heaters	Dryers[b]	Central Heating	
	Free-Standing[a]	Built-in			Warm Air Furnaces	Boilers
January	107	8	262	76	138	25
February	116	9	233	59	131	29
March	133	9	262	59	122	31
April	106	8	257	52	87	27
May	107	8	210	41	71	21
June	112	10	215	41	83	23
July	80	7	199	46	94	14
August	102	8	208	57	123	21
September	120	8	237	63	147	29
October	126	7	271	74	174	31
November	103	9	218	61	144	25
December	121	10	246	54	131	18
Total[c]	1,333	102	2,818	682	1,446	293

a. Includes "set-in" type ranges.
b. Excludes combination washer-dryer units.
c. Totals may not add due to rounding.
Source: Gas Appliance Manufacturers Association. *Statistical Highlights*.

TABLE 110
MANUFACTURER SHIPMENTS OF GAS RANGES, AND VALUE, BY TYPE OF RANGE, 1980

Type of Range	Units (Thousands)	Percentages of Total
Apartment Ranges	208.2	13.5
Standard Ranges[a]	1,121.5	72.9
Combination and Heater Ranges[b]	2.7	.2
Total Free Standing Ranges[c]	1,332.4	86.6
High Oven Ranges	104.4	6.8
Total Free Standing and High Oven Ranges	1,436.8	93.4
Built-In Units	101.7	6.6
Total[a]	1,538.5	100.0

a. The above figures exclude gas ranges used in travel trailers and recreational vehicles.
b. Includes bungalow ranges.
c. Includes "set-in" type ranges.
Source: Gas Appliance Manufacturers Association. *Residential Gas Ranges.*

TABLE 111
MANUFACTURER SHIPMENTS OF GAS WATER HEATERS, BY SIZE, 1980

Size in Gallons	Total Shipments (Thousands of Units)	Percentage of Total Shipments
Less than 30	78.3	2.8
30-39.9	1,064.0	37.8
40-47.4	1,272.3	45.1
47.5 and over	403.7	14.3
Total	2,818.3	100.0

Source: Gas Appliance Manufacturers Association. *Residential Gas-Fired Automatic Storage Water Heaters.*

TABLE 112
MANUFACTURER SHIPMENTS OF GAS FURNACES, BY TYPE AND SIZE, 1980

Type	Percentage[a] of Total	Size by Btu Output	Percentage[b] of Total
Gravity	0.1	Less than 50,000	11.5
		50,000-74,999	26.6
Forced Warm Air	99.9	75,000-89,999	28.6
Up-flow	73.1	90,000-134,999	29.4
Counter Flow	12.6	135,000-179,999	3.7
Horizontal	14.2	180,000 and over	0.2
Total	100.0	Total	100.0

a. Based on shipments of 1,445,700 gas fired furnaces.
b. Excludes gravity furnaces. Based on shipments of 1,444,600 gas fired forced warm air furnaces.
Source: Gas Appliance Manufacturers Association. *Gas-Fired Warm Air Furnaces.*

TABLE 113
MANUFACTURER SHIPMENTS OF GAS-FIRED BOILERS, BY TYPE AND SIZE, 1980

(Percentages)

Btu Output	Steam	Hot Water	Total
Less than 50,000	0.0	1.7	1.3
50,000- 74,999	1.2	11.8	9.3
75,000- 99,999	13.6	20.5	18.9
100,000-124,999	28.0	28.3	28.2
125,000-149,999	15.9	16.0	16.0
150,000-199,999	14.4	10.6	11.5
200,000-249,999	10.7	4.2	5.7
250,000-449,999	10.0	4.8	6.0
450,000-949,999	3.6	1.2	1.8
950,000 and over	2.6	0.9	1.3
Total*	100.0	100.0	100.0

*Based on shipments of 68,800 steam boilers and 224,500 hot water boilers, for a total of 293,300 units.
Source: Gas Appliance Manufacturers Association. *Gas-Fired Boilers.*

TABLE 115
NUMBER OF OCCUPIED HOUSING UNITS, BY TYPE OF HEATING FUEL AND BY CENSUS REGION, 1970–1978

(Thousands of Occupied Units[a])

Year and Region	Total	Gas	Electricity	Oil[b]	Other[c]/None
1970					
United States	**63,445**	**35,014**	**4,876**	**16,474**	**7,083**
Northeast	15,483	5,741	474	8,414	850
North Central	17,535	11,708	546	3,431	1,852
South	19,257	9,626	2,544	3,645	3,443
West	11,169	7,939	1,312	984	936
1973					
United States	**69,337**	**38,461**	**7,213**	**17,235**	**6,429**
Northeast	16,152	5,850	596	9,249	457
North Central	18,742	12,810	901	3,304	1,727
South	21,806	10,783	3,897	3,761	3,366
West	12,638	9,018	1,818	921	880
1974					
United States	**70,831**	**39,481**	**8,412**	**16,827**	**6,111**
Northeast	16,282	5,952	709	9,215	405
North Central	18,993	13,240	1,041	3,148	1,564
South	22,489	11,069	4,584	3,567	3,268
West	13,067	9,220	2,079	897	871
1975					
United States	**72,523**	**40,933**	**9,173**	**16,299**	**6,117**
Northeast	16,508	6,446	802	8,875	386
North Central	19,393	13,666	1,154	3,027	1,546
South	23,105	11,352	4,965	3,508	3,280
West	13,518	9,469	2,253	889	907
1976					
United States	**74,005**	**41,219**	**10,151**	**16,451**	**6,184**
Northeast	16,544	6,140	846	9,161	397
North Central	19,722	13,803	1,366	3,004	1,549
South	23,742	11,449	5,498	3,488	3,307
West	13,998	9,826	2,441	798	933
1977					
United States	**75,280**	**41,543**	**11,146**	**16,060**	**6,531**
Northeast	16,637	6,151	958	9,103	425
North Central	19,855	13,893	1,506	2,843	1,613
South	24,379	11,577	6,033	3,335	3,434
West	14,407	9,922	2,649	778	1,058
1978					
United States	**77,167**	**42,522**	**12,258**	**16,071**	**6,316**
Northeast	16,952	6,301	999	9,252	400
North Central	20,171	14,140	1,685	2,817	1,529
South	25,093	11,956	6,561	3,263	3,313
West	14,951	10,125	3,013	739	1,074

a. Units include both single-family and multifamily.
b. Oil includes kerosene.
c. Other includes LP gas, coal and wood.
Sources: For 1970. U.S Bureau of the Census, Census of Housing; 1970. *Detailed Housing Characteristics.*
For 1973–1978 U.S. Bureau of the Census, Current Housing Reports – Series H-150. *Annual Housing Survey.* Part A.

TABLE 116
NEW ONE-FAMILY HOUSES COMPLETED, BY TYPE OF HEATING FUEL AND BY CENSUS REGION, 1972-1980[a]

(Thousands of Units)

Year and Region	Total	Gas	Electricity	Oil	Other/None
1972					
United States	1,143	621	416	93	13
Northeast	149	55	44	48	b
North Central	231	170	38	22	b
South	524	222	272	22	8
West	239	173	63	b	b
1973					
United States	1,197	560	497	125	16
Northeast	156	53	44	55	5
North Central	262	160	66	34	b
South	526	172	312	35	7
West	253	175	74	b	b
1974					
United States	940	385	458	85	11
Northeast	132	38	51	42	b
North Central	220	112	79	26	3
South	397	109	266	16	5
West	191	126	63	b	b
1975					
United States	875	347	429	82	18
Northeast	114	27	37	47	3
North Central	218	107	83	20	8
South	362	105	239	14	4
West	182	107	71	b	3
1976					
United States	1,034	407	499	110	19
Northeast	121	18	38	62	4
North Central	271	130	109	26	6
South	410	120	260	22	8
West	232	139	91	b	b
1977					
United States	1,258	476	635	120	28
Northeast	135	22	42	67	5
North Central	300	138	121	30	11
South	512	139	341	23	8
West	311	176	130	b	4
1978					
United States	1,369	511	710	109	40
Northeast	141	23	48	60	11
North Central	300	149	107	32	11
South	571	153	392	16	9
West	357	186	162	b	9
1979					
United States	1,301	512	662	86	41
Northeast	135	32	47	48	7
North Central	294	162	96	22	14
South	535	147	365	14	9
West	337	170	154	b	12
1980					
United States	957	393	483	29	52
Northeast	100	35	36	18	11
North Central	170	101	47	6	16
South	455	136	303	5	11
West	232	121	97	b	14

a. Includes only privately-owned housing units.
b. Withheld because estimate did not meet Bureau of the Census publication standards.
Source: U.S. Bureau of the Census, Construction Reports—Series C25, *Characteristics of New-Housing*.

TABLE 117
UNITS IN NEW MULTIFAMILY BUILDINGS COMPLETED, BY TYPE OF HEATING FUEL AND BY CENSUS REGION, 1972-1980

(Thousands of Units[a])

Year and Region	Total	Gas	Electricity	Oil	Other/None
1972					
United States	828	b	b	b	b
Northeast	132	b	b	b	b
North Central	174	b	b	b	b
South	304	b	b	b	b
West	218	b	b	b	b
1973					
United States	903	c	c	c	c
Northeast	138	c	c	c	c
North Central	180	c	c	c	c
South	380	c	c	c	c
West	205	c	c	c	c
1974					
United States	788	279	472	30	7
Northeast	99	28	44	22	6
North Central	157	93	62	1	1
South	359	76	275	7	c
West	173	81	91	c	c
1975					
United States	442	145	260	30	7
Northeast	72	17	25	24	6
North Central	96	48	47	c	1
South	170	31	133	5	c
West	105	48	56	c	c
1976					
United States	343	113	202	24	3
Northeast	50	11	21	16	2
North Central	84	39	44	1	c
South	103	19	78	6	1
West	106	45	60	c	c
1977					
United States	399	115	261	18	4
Northeast	41	9	20	10	2
North Central	99	39	54	6	c
South	125	16	106	3	c
West	133	51	81	c	1
1978					
United States	498	131	339	24	5
Northeast	41	9	13	18	c
North Central	117	44	70	2	c
South	181	16	161	3	1
West	160	61	95	c	4
1979					
United States	570	150	386	27	6
Northeast	53	11	21	21	c
North Central	121	50	69	2	1
South	227	22	200	4	2
West	169	68	97	c	4
1980					
United States	545	165	362	12	6
Northeast	46	16	20	10	—
North Central	104	46	57	—	1
South	242	36	204	2	—
West	153	67	81	—	5

a. Includes only privately-owned housing units.
b. Not available.
c. Withheld because estimate did not meet Bureau of the Census publication standards.
Source: U.S. Bureau of the Census, Construction Reports—Series C25, *Characteristics of New-Housing.*

TABLE 118
NUMBER OF OCCUPIED HOUSING UNITS, BY TYPE OF COOKING FUEL AND BY CENSUS REGION, 1970-1978

(Thousands of Occupied Units[a])

Year and Region	Total	Gas	Electricity	Oil[b]	Other[c]/None
1970					
United States	**63,445**	**31,244**	**25,769**	**303**	**6,130**
Northeast	15,483	9,216	4,897	150	1,217
North Central	17,535	8,956	6,833	45	1,703
South	19,257	7,591	8,904	84	2,679
West	11,169	5,482	5,135	24	531
1973					
United States	**69,337**	**31,924**	**31,013**	**87**	**6,313**
Northeast	16,152	9,393	5,503	24	1,232
North Central	18,742	8,940	8,011	23	1,768
South	21,807	7,942	11,065	29	2,771
West	12,636	5,648	6,434	11	543
1974					
United States	**70,831**	**31,908**	**32,720**	**82**	**6,120**
Northeast	16,281	9,211	5,747	46	1,277
North Central	18,993	8,908	8,423	14	1,648
South	22,489	7,985	11,797	19	2,688
West	13,067	5,803	6,754	4	506
1975					
United States	**72,523**	**32,493**	**33,944**	**76**	**6,011**
Northeast	16,508	9,244	5,973	27	1,264
North Central	19,393	9,051	8,699	16	1,627
South	23,105	8,229	12,224	31	2,621
West	13,518	5,968	7,048	3	499
1976					
United States	**74,003**	**32,299**	**35,669**	**44**	**5,991**
Northeast	16,545	9,086	6,178	14	1,267
North Central	19,722	8,978	9,165	7	1,572
South	23,741	8,179	12,897	22	2,643
West	13,996	6,057	7,429	1	509
1977					
United States	**75,280**	**32,207**	**37,042**	**45**	**5,986**
Northeast	16,635	9,096	6,280	17	1,242
North Central	19,857	8,857	9,426	14	1,560
South	24,379	8,146	13,563	11	2,659
West	14,408	6,107	7,773	2	526
1978					
United States	**77,167**	**32,576**	**38,779**	**107**	**5,705**
Northeast	16,952	9,185	6,568	44	1,155
North Central	20,171	8,847	9,833	32	1,459
South	25,094	8,242	14,234	24	2,594
West	14,950	6,302	8,144	7	497

a. Units include both single-family and multifamily.
b. Oil includes kerosene.
c. Other includes LP gas, coal and wood.
Sources: For 1970, U.S. Bureau of the Census, Census of Housing; 1970. *Detailed Housing Characteristics*. For 1973-1977, U.S. Bureau of the Census, Current Housing Reports – Series H-150, *Annual Housing Survey*, Part A. For 1978, U.S. Bureau of the Census, Current Housing Reports – Series H-150, *Annual Housing Survey*, Part F.

TABLE 119
NUMBER OF OCCUPIED HOUSING UNITS, BY TYPE OF FUEL USED FOR WATER HEATING AND CLOTHES DRYING, AND BY CENSUS REGION, 1970.

(Thousands of Occupied Units[a])

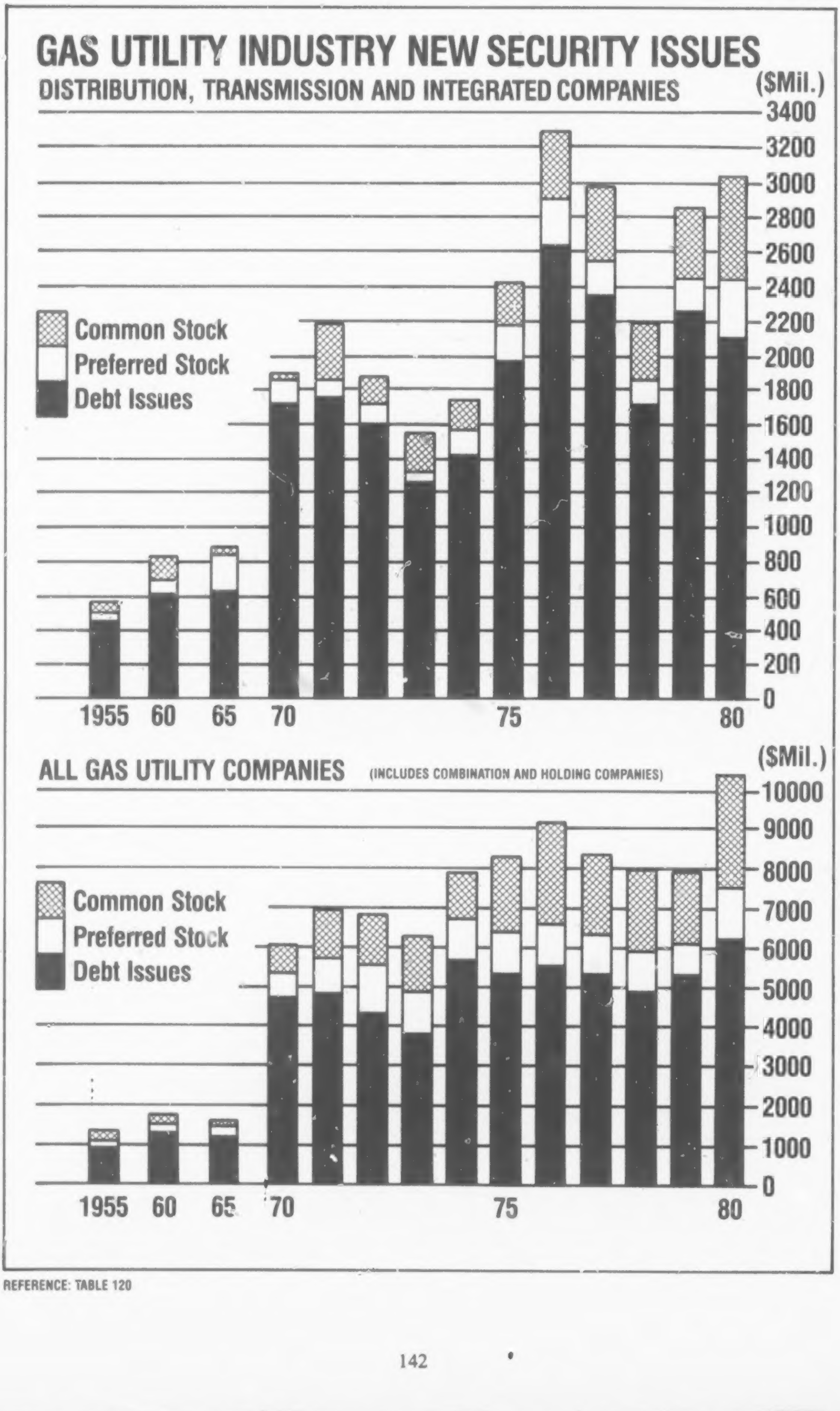
Use and Region	Total	Gas	Electricity	Oil[b]	Other[c]/None
Water Heating					
United States	63,445	34,959	16,103	6,201	6,184
Northeast	15,483	6,860	2,314	5,364	942
North Central	17,535	11,574	4,034	247	1,682
South	19,257	8,826	6,921	507	3,004
West	11,169	7,699	2,834	83	556
Clothes Drying					
United States	63,445	7,840	18,637	d	36,970[e]
Northeast	15,483	1,830	4,002	d	9,648[e]
North Central	17,535	3,547	5,708	d	8,282[e]
South	19,257	1,175	5,173	d	12,910[e]
West	11,169	1,288	3,754	d	6,130[e]

a. Units include both single-family and multifamily.
b. Oil includes kerosene.
c. Other includes LP gas, coal and wood.
d. Not applicable.
e. Occupied housing units with no clothes dryers.
f. 1980 data not available.
Source: For 1970, U.S. Bureau of the Census, Census of Housing: 1970, *Detailed Housing Characteristics*.

SECTION XII
FINANCE
PART 1. SECURITY ISSUES

	1980	% Change 80/79
No. of Issues		
Total	275	−14.6
Common Stock	101	−37.7
Preferred Stock	31	+ 3.3
Debt Issues	143	+10.0
Amount ($000)		
Total	10,508,334	+32.0
Common Stock	2,879,775	+54.7
Preferred Stock	1,288,237	+66.5
Debt Issues	6,340,322	+19.1

CHART 18



REFERENCE: TABLE 120

TABLE 114
GAS CONSUMPTION BY RESIDENTIAL APPLIANCES, 1975
(Average Consumption, Excluding Extremes)

(Therms per year)

	Residential Customers	House Range	Apt. Range	Water Heater	Clothes Dryer (gas pilot)	Clothes Dryer (elec. pilot)	Incinerator	Gas Light	Air Conditioner Consumption Per Ton	Gas Grill	Gas Heat All Types
United States	28,778,360	105	83	325	73	48	151	184	273	27	1,069
New England	1,068,258	101	70	284	86	74	158	178	237	21	1,372
Middle Atlantic	6,263,484	99	77	336	67	50	147	188	227	22	1,279
East North Central	7,553,917	100	82	341	74	44	155	183	196	27	1,350
West North Central	2,834,033	90	70	323	82	52	154	171	269	23	1,218
South Atlantic	2,790,315	96	84	301	65	39	138	181	334	27	902
East South Central	912,697	118	104	291	72	51	*	165	258	42	973
West South Central	3,166,276	118	95	299	69	38	*	191	498	40	731
Mountain	999,675	103	84	259	76	45	138	185	*	28	1,162
Pacific	3,189,705	108	92	357	82	56	*	188	257	*	755

*Not available.

Note: A total of 152 companies with a total of 28,778,360 residential customers provided data for this summary. This represents 70 percent of the 41,336,500 residential gas customers in the United States (1975).

TABLE 120
GAS UTILITY INDUSTRY SECURITY ISSUES
OF DISTRIBUTION, TRANSMISSION, GAS HOLDING,[a] AND COMBINATION GAS AND ELECTRIC COMPANIES
1955-1980[b]

							Debt Issues							
	Total		Common Stock		Preferred Stock		Total		Bonds		Debentures		Notes	
Year	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)
1955	143	$1,412,753	35	$ 274,153	23	$ 192,043	85	$ 946,557	60	$ 734,425	15	$146,693	10	$ 65,439
1960	193	1,859,043	67	240,509	19	202,267	107	1,416,267	79	1,098,250	20	276,323	8	41,694
1965	176	1,728,807	60	99,444	28	324,790	88	1,304,573	61	854,010	18	410,900	9	39,663
1966	164	1,966,903	56	109,905	22	200,906	86	1,656,092	70	1,375,390	8	222,412	8	58,290
1967	187	2,930,328	50	59,205	23	265,847	114	2,605,276	82	1,997,644	21	565,274	11	42,358
1968	167	2,760,665	52	143,110	16	258,254	99	2,359,301	70	1,540,501	18	588,750	11	230,050
1969	204	3,443,576	78	457,935	18	267,762	108	2,717,879	64	1,664,945	26	758,569	18	294,365
1970	280	6,030,084	68	745,638	33	620,674	179	4,663,772	125	3,502,000	27	897,500	27	264,272
1971	330	7,012,900	96	1,283,271	47	965,439	187	4,764,190	103	3,193,366	26	927,500	58	643,324
1972	280	6,832,495	83	1,306,307	39	1,185,808	158	4,340,380	87	3,032,306	13	554,500	58	753,574
1973	286	6,302,378	96	1,408,410	39	1,073,959	151	3,820,009	82	2,466,690	6	260,000	63	1,093,319
1974	286	7,889,359	102	1,144,544	39	1,128,175	145	5,616,640	78	3,950,281	17	739,519	50	926,840
1975	353	8,312,575	141	1,973,385	42	1,059,396	170	5,279,794	101	3,661,125	19	911,571	50	707,098
1976	336	9,104,026	152	2,472,747	41	1,108,268	143	5,523,011	75	2,899,279	16	860,500	52	1,763,232
1977	336	8,244,438	167	1,864,904	40	1,106,130	129	5,273,404	70	2,956,200	10	461,500	49	1,855,704
1978	351	7,933,090	163	2,167,077	48	1,055,458	140	4,710,555	73	3,189,650	12	306,516	55	1,214,389
1979	322	7,959,649	162	1,860,954	30	773,692	130	5,325,003	69	2,908,350	11	895,000	50	1,521,653
1980	275	10,508,334	101	2,879,775	31	1,288,237	143	6,340,322	73	3,571,945	18	1,510,000	52	1,258,377

a. Gas holding companies used in this section are as follows: Colonial Gas Energy System, Columbia Gas Systems, Inc., Consolidated Natural Gas, Northern States Power Company, Peoples Energy Corp., Public Service Company of Colorado, Union Electric Company.

b. All new and refunding security issues, except sales by subsidiaries to parent companies and direct exchanges, for which data were obtainable have been included. Short term notes for less than one year are omitted. Bonds, debentures, and notes are included in principal amounts; preferred stocks at stated or liquidating values; and common stocks at offerings prices.

TABLE 121

GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF SECURITY ISSUES OF DISTRIBUTION, TRANSMISSION, GAS HOLDING,[a] AND COMBINATION GAS AND ELECTRIC COMPANIES

1955-1980[b]

	Preferred Stock				Bonds				Debentures				Sample Amount (000)		
	Cost		Yield		Cost		Yield		Cost		Yield				
Year	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Preferred Stock	Bonds	Debentures
1955	4.69	4.56	4.59	4.46	3.55	3.48	3.53	3.46	3.98	3.74	3.95	3.70	$ 188,868	$ 676,975	$136,593
1960	5.61	5.51	5.50	5.45	5.22	5.03	5.17	4.98	5.22	5.09	5.14	5.03	192,767	1,017,700	266,602
1965	4.71	4.78	4.69	4.76	4.77	4.74	4.75	4.71	4.84	4.87	4.81	4.82	268,200	806,460	403,700
1966	5.60	5.61	5.59	5.57	5.80	5.80	5.74	5.73	5.94	5.91	5.86	5.83	89,130	1,251,935	150,000
1967	6.15	6.18	6.10	6.11	6.17	6.18	6.11	6.10	6.43	6.43	6.32	6.35	224,370	1,882,995	507,500
1968	6.69	6.63	6.62	6.55	6.80	6.82	6.73	6.80	7.13	7.19	7.04	7.10	133,000	1,448,801	442,000
1969	8.08	8.04	7.95	7.93	7.66	7.61	8.52	8.22	8.39	8.47	8.52	8.22	226,838	1,664,945	758,569
1970	9.25	9.27	9.16	9.18	9.04	9.08	9.06	9.26	9.16	9.36	9.06	9.26	570,674	3,492,500	897,000
1971	8.16	7.98	8.05	7.87	8.06	7.90	7.97	7.81	8.16	8.14	8.07	8.05	922,312	3,098,589	912,500
1972	7.70	7.65	7.62	7.56	7.60	7.56	7.53	7.50	7.53	7.44	7.46	7.38	1,074,539	2,631,306	455,500
1973	7.72	7.61	7.66	7.54	7.98	7.93	7.91	7.87	7.80	7.77	7.73	7.71	1,051,459	2,137,890	200,000
1974	9.96	9.83	9.82	9.68	9.76	9.84	9.67	9.75	9.48	9.34	9.40	9.25	996,175	3,222,000	535,000
1975	10.87	10.89	10.55	10.53	10.10	10.06	10.00	9.97	10.28	10.31	10.17	10.20	1,028,515	3,346,050	801,000
1976	10.15	9.49	9.16	9.24	8.96	9.01	8.87	8.93	8.88	8.87	8.81	8.80	1,050,268	2,826,590	735,000
1977	8.50	8.45	8.34	8.31	8.51	8.50	8.45	8.44	8.74	8.36	8.63	8.29	973,512	2,682,500	265,000
1978	8.84	8.90	8.75	8.68	8.40	8.18	8.38	8.01	9.26	9.02	9.12	8.89	806,206	2,669,900	150,000
1979	9.05	9.32	9.03	9.23	11.14	10.55	11.12	10.48	10.81	11.12	10.65	11.04	705,560	2,348,300	645,000
1980	11.91	12.40	11.67	12.20	11.99	12.92	11.90	12.82	13.07	12.67	12.97	12.57	935,500	3,038,400	925,000

a. Refer to Table 120 for name of gas holding companies.

b. Includes only those preferred stocks, bonds, and debentures shown in Table 120 for which necessary cost and yield data were available.

Definitions: "Cost" refers to the expenses incurred by a company relative to new security issues over the life of debt issues and fixed dividends (if applicable) on preferred stocks. It includes underwriter fees, plus discount expenses less premiums.

"Yield" is the rate of return on investment by a buyer of these debt issues and fixed dividends (if applicable) expected on preferred stock. It includes underwriter fees, plus premium expenses less discounts.

TABLE 122
GAS UTILITY INDUSTRY LONG TERM DEBT ISSUES, BY MOODY'S BOND RATING CATEGORY, 1980

	Issues		Cost		Yield	
Rating	Number	Sample Amount (000)	Average	Weighted Average	Average	Weighted Average
Aaa	*	*	0.00	0.00	0.00	0.00
Aa	13	$1,375,000	12.63	13.08	12.53	12.98
A	13	805,000	13.37	13.36	13.25	13.24
Baa	3	205,000	14.17	14.15	14.04	14.02
Ba	*	*	0.00	0.00	0.00	0.00

*No issues used in this sample.

TABLE 123
GAS UTILITY INDUSTRY COMMON STOCK ISSUES, BY TYPE OF COMPANY
1974-1980[a]

Type of Company	1974	1975	1976	1977	1978	1979	1980
Total							
Amount (000)	$1,144,544	$1,973,385	$2,472,747	$1,864,904	$2,167,077	$1,860,954	$2,879,775
No. of Issues	102	141	152	167	163	162	101
Distribution							
Amount (000)	$8,111	$65,016	$71,185	$94,917	$77,052	$53,295	$277
No. of Issues	10	14	9	13	16	9	4
Transmission							
Amount (000)	$106,671	$139,824	$251,020	$107,387	$80,214	$323,125	$453,019
No. of Issues	7	4	13	9	13	15	7
Integrated							
Amount (000)	$72,594	$45,711	$63,363	$42,398	$182,100	$43,012	$156,900
No. of Issues	18	19	13	16	19	15	5
Combination Utilities							
Amount (000)	$821,587	$1,312,958	$1,790,464	$1,425,839	$1,701,314	$1,385,842	$2,053,120
No. of Issues	60	87	103	115	106	120	80
Gas Holding[b]							
Amount (000)	$135,581	$409,876	$296,715	$194,363	$126,397	$55,680	$216,459
No. of Issues	7	17	14	14	9	3	5

a. See Footnote "b", Table 120 for description of securities included and the derivation of stated amounts.

b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

TABLE 124
GAS UTILITY INDUSTRY INDEXES OF COMMON STOCK PRICES, DIVIDENDS, YIELDS, AND EARNINGS BY TYPE OF COMPANY, 1975-1980

Year	1975		1976		1977		1978		1979		1980	
Type of Company / Week	Jun 27	Dec 26	Jun 25	Dec 31	Jun 24	Dec 30	Jun 30	Dec 29	Jun 29	Dec 27	Jun 27	Dec 31
Natural Gas Industry												
a) Market Price ($ Per Share)	63.04	58.15	70.12	82.05	85.74	80.80	77.72	72.47	87.10	104.10	108.29	139.35
b) Dividend ($ Per Share)	4.08	4.25	4.37	4.55	4.73	4.96	5.08	5.43	5.56	5.97	6.18	6.45
c) Yield (Percent)	6.47	7.31	6.23	5.55	5.52	6.14	6.54	7.49	6.38	5.73	5.71	4.63
d) Earnings ($ Per Share)*	8.68	9.04	10.01	10.55	10.93	11.30	11.52	11.89	11.76	12.22	13.06	14.21
Distribution Companies												
a) Market Price ($ Per Share)	43.25	38.29	43.98	51.80	53.71	51.02	48.46	45.97	54.04	53.83	54.05	56.19
b) Dividend ($ Per Share)	3.41	3.48	3.69	3.70	3.87	3.93	4.07	4.18	4.34	4.44	4.61	4.68
c) Yield (Percent)	7.88	9.09	8.39	7.14	7.21	7.70	8.40	9.09	8.03	8.25	8.53	8.33
d) Earnings ($ Per Share)*	5.14	4.72	4.98	5.52	6.30	5.99	7.43	7.79	7.23	8.00	8.53	8.07
Transmission Companies												
a) Market Price ($ Per Share)	77.46	72.85	94.77	105.00	106.63	98.94	94.09	87.09	109.73	134.16	138.88	186.77
b) Dividend ($ Per Share)	4.56	4.78	4.93	5.12	5.28	5.64	5.74	6.25	6.40	7.00	7.20	7.59
c) Yield (Percent)	5.89	6.56	5.20	4.88	4.95	5.70	6.10	7.18	5.83	5.22	5.18	4.06
d) Earnings ($ Per Share)*	10.53	11.90	13.77	13.59	13.85	14.48	14.36	14.37	14.74	15.30	15.76	19.32

*Earnings are for twelve month periods.
Source: Moody's Investors Service.

TABLE 125
GAS UTILITY INDUSTRY PREFERRED STOCK ISSUES, BY TYPE OF COMPANY
1974-1980[a]

Type of Company	1974	1975	1976	1977	1978	1979	1980
Total							
Amount (000)	$1,128,175	$1,059,396	$1,108,268	$1,106,130	$1,055,458	$773,692	$1,288,237
No. of Issues	39	42	41	40	48	30	31
Distribution							
Amount (000)	$24,000	$15,000	$78,180	$57,465	$116,533	$92,575	$34,000
No. of Issues	2	2	5	3	8	5	3
Transmission							
Amount (000)	$140,000	$110,000	$152,000	$74,618	$3,000	$70,117	$259,737
No. of Issues	1	2	5	5	1	3	1
Integrated							
Amount (000)	$0	$94,075	$54,500	$53,250	$22,252	$33,500	$3,500
No. of Issues	0	5	4	4	2	2	1
Combination Utilities							
Amount (000)	$804,500	$737,250	$738,588	$880,797	$913,673	$577,500	$991,000
No. of Issues	31	31	24	27	37	20	26
Gas Holding[b]							
Amount (000)	$159,675	$103,071	$85,000	$40,000	$0	$0	$0
No. of Issues	5	2	3	1	0	0	0

a. See Footnote "b", Table 120 for description of securities included and the derivation of stated amounts

b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

TABLE 127
GAS UTILITY INDUSTRY BOND ISSUES, BY TYPE OF COMPANY
1974–1980[a]

Type of Company	1974	1975	1976	1977	1978	1979	1980
Total							
Amount (000)	$3,950,281	$3,661,125	$2,899,279	$2,956,200	$3,189,650	$2,908,350	$3,571,945
No. of Issues	78	101	75	70	73	69	73
Distribution							
Amount (000)	$188,700	$321,375	$225,965	$176,000	$503,750	$371,150	$25,545
No. of Issues	10	22	12	8	11	14	3
Transmission							
Amount (000)	$145,831	$227,000	$125,000	$75,000	$0	$167,000	$53,000
No. of Issues	3	6	2	3	0	3	1
Integrated							
Amount (000)	$165,500	$234,750	$111,000	$158,500	$188,000	$111,100	$122,500
No. of Issues	7	11	5	10	8	9	7
Combination Utilities							
Amount (000)	$3,305,250	$2,678,000	$2,364,814	$2,496,700	$2,446,400	$2,259,100	$3,160,900
No. of Issues	56	59	54	48	52	43	59
Gas Holding[b]							
Amount (000)	$145,000	$200,000	$72,500	$50,000	$51,500	$0	$210,000
No. of Issues	2	3	2	1	2	0	3

a. See Footnote "b", Table 120 for description of securities included and the derivation of stated amounts.

b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

TABLE 126
GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF PREFERRED STOCK ISSUES
1974-1980[a]

	1974		1975		1976		1977		1978		1979		1980	
	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield
Total														
Average	9.96	9.82	10.87	10.55	10.15	9.16	8.50	8.34	8.84	8.75	9.05	9.03	11.91	11.67
Weighted Average	9.83	9.68	10.89	10.53	9.49	9.24	8.45	8.31	8.90	8.68	9.32	9.23	12.40	12.20
Sample Amount (000)		$996,175		$1,028,515		$1,050,268		$973,512		$806,206		$705,500		$935,500
Distribution														
Average	8.92	8.80	10.32	10.10	9.88	9.50	8.70	8.51	8.63	8.34	9.34	9.30	9.26	9.08
Weighted Average	8.92	8.80	10.42	10.13	9.88	9.50	8.47	8.36	8.49	8.31	9.34	9.30	9.34	9.13
Sample Amount (000)		$20,000		$15,000		$20,180		$57,465		$83,533		$70,000		$34,000
Transmission														
Average	8.57	8.52	11.58	11.10	9.68	9.35	7.49	7.45	9.50	9.40	8.38	8.38	0.00	0.00
Weighted Average	8.57	8.52	11.61	11.14	10.02	9.65	7.49	7.45	9.50	9.40	8.43	8.43	0.00	0.00
Sample Amount (000)		$40,000		$110,000		$152,000		$30,000		$3,000		$70,000		$0
Integrated														
Average	0.00	0.00	10.82	10.44	8.92	8.79	8.69	8.55	8.70	8.62	9.50	9.50	9.50	9.50
Weighted Average	0.00	0.00	10.63	10.33	8.65	8.63	8.40	8.14	8.70	8.62	9.50	9.50	9.50	9.50
Sample Amount (000)		$0		$94,075		$54,500		$53,250		$12,000		$8,500		$3,500
Combination Utilites														
Average	10.04	9.89	10.87	10.55	10.56	9.17	8.47	8.31	8.52	8.45	8.99	8.93	12.38	12.12
Weighted Average	9.79	9.66	10.81	10.45	9.45	9.21	8.47	8.33	8.95	8.72	9.42	9.32	12.52	12.32
Sample Amount (000)		$776,500		$707,250		$738,588		$792,797		$707,673		$557,000		$898,000
Gas Holding[b]														
Average	10.04	10.44	10.95	10.73	9.43	9.13	8.80	8.50	0.00	0.00	0.00	0.00	0.00	0.00
Weighted Average	9.85	10.22	10.95	10.72	9.31	9.01	8.80	8.50	0.00	0.00	0.00	0.00	0.00	0.00
Sample Amount (000)		$159,675		$102,190		$85,000		$40,000		$0		$0		$0

a. Includes only those issues in Table 125 for which necessary cost and yield data were available.

b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

Definitions: "Cost" refers to the expenses incurred by a company. It includes dividends, underwriter fees, plus discount expenses less premiums.
"Yield" is the rate of return on investment by a buyer.

TABLE 128
GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF BOND ISSUES
1974-1980[a]

	1974		1975		1976		1977		1978		1979		1980	
	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield
Total														
Average	9.76	9.67	10.10	10.00	8.96	8.87	8.51	8.45	8.40	8.38	11.14	11.12	11.99	11.90
Weighted Average	9.84	9.75	10.06	9.97	9.01	8.93	8.50	8.44	8.18	8.01	10.55	10.48	12.92	12.82
Sample Amount (000)		$3,322,000		$3,346,050		$2,826,590		$2,682,200		$2,669,900		$2,348,300		$3,038,400
Distribution														
Average	9.20	9.11	9.96	9.85	8.44	8.39	8.78	8.72	7.00	7.10	11.32	11.26	12.09	12.00
Weighted Average	9.04	8.97	9.95	9.84	8.93	8.87	8.62	8.54	6.67	6.61	11.10	11.42	12.09	12.00
Sample Amount (000)		$170,000		$241,550		$201,365		$123,000		$310,000		$224,150		$15,000
Transmission														
Average	9.34	9.28	10.26	10.13	9.09	9.06	0.00	0.00	0.00	0.00	10.63	10.53	0.00	0.00
Weighted Average	9.59	9.52	10.23	10.09	9.25	9.16	0.00	0.00	0.00	0.00	10.63	10.53	0.00	0.00
Sample Amount (000)		$62,000		$207,000		$125,000		$0		$0		$50,000		$0
Integrated														
Average	10.25	10.13	10.44	10.36	9.52	9.43	8.97	8.89	8.50	8.45	12.85	12.75	12.92	12.87
Weighted Average	10.49	10.38	10.53	10.43	9.28	9.19	8.86	8.79	8.96	8.88	12.85	12.75	12.30	12.23
Sample Amount (000)		$94,000		$170,000		$79,000		$129,000		$157,000		$70,000		$47,000
Combination Utilities														
Average	9.84	9.75	10.09	9.99	8.93	8.89	8.42	8.36	8.85	8.78	9.74	9.92	11.85	11.75
Weighted Average	9.91	9.82	10.04	9.95	8.99	8.92	8.47	8.41	9.19	9.12	10.40	10.29	12.93	12.83
Sample Amount (000)		$2,921,000		$2,527,500		$2,351,225		$2,380,200		$2,152,900		$2,004,150		$2,766,400
Gas Holding[b]														
Average	8.40	8.34	9.90	9.81	9.00	8.94	8.41	8.34	9.23	9.18	0.00	0.00	13.23	13.14
Weighted Average	8.40	8.34	9.93	9.84	9.00	8.94	8.41	8.34	9.23	9.18	0.00	0.00	12.95	12.86
Sample Amount (000)		$75,000		$200,000		$70,000		$50,000		$50,000		$0		$210,000

a. Includes only those issues in Table 127 for which necessary cost and yield data were available.

b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

Definitions: "Cost" refers to the expenses incurred by a company. It includes dividends, underwriter fees, plus discount expenses less premiums.
"Yield" is the rate of return on investment by a buyer.

TABLE 129

GAS UTILITY INDUSTRY DEBENTURE ISSUES, BY TYPE OF COMPANY

1974-1980[a]

Type of Company	1974	1975	1976	1977	1978	1979	1980
Total							
Amount (000)	$739,519	$911,571	$860,500	$461,500	$306,516	$895,000	$1,510,000
No. of Issues	17	19	16	10	12	11	18
Distribution							
Amount (000)	$20,000	$0	$25,000	$70,000	$0	$40,000	$0
No. of Issues	1	0	1	3	0	1	0
Transmission							
Amount (000)	$368,169	$360,771	$370,000	$175,000	$130,000	$450,000	$663,500
No. of Issues	5	8	6	1	2	4	8
Integrated							
Amount (000)	$140,700	$234,800	$315,500	$101,500	$106,500	$215,000	$416,500
No. of Issues	4	6	7	4	7	3	5
Combination Utilities							
Amount (000)	$0	$100,000	$0	$0	$70,016	$15,000	$230,000
No. of Issues	0	1	0	0	3	1	3
Gas Holding[b]							
Amount (000)	$210,650	$216,000	$150,000	$115,000	$0	$175,000	$200,000
No. of Issues	7	4	2	2	0	2	2

[a] See Footnote "b", Table 120 for description of securities included and the derivation of stated amounts.

[b] A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

TABLE 131
GAS UTILITY INDUSTRY NOTE ISSUES, BY TYPE OF COMPANY
1974–1980[a]

Type of Company	1974	1975	1976	1977	1978	1979	1980
Total							
Amount (000)	$926,840	$707,098	$1,763,232	$1,855,704	$1,214,389	$1,521,653	$1,258,377
No. of Issues	50	50	52	49	55	50	52
Distribution							
Amount (000)	$67,500	$7,000	$34,400	$43,585	$97,854	$140,500	$153,900
No. of Issues	5	3	3	8	6	6	4
Transmission							
Amount (000)	$262,500	$510,951	$1,320,119	$663,644	$468,150	$666,066	$455,764
No. of Issues	17	24	20	15	12	7	16
Integrated							
Amount (000)	$50,082	$58,316	$101,070	$882,390	$215,441	$318,770	$228,571
No. of Issues	4	7	11	8	15	14	9
Combination Utilities							
Amount (000)	$546,738	$125,836	$252,357	$254,774	$432,775	$396,317	$383,142
No. of Issues	24	11	14	16	21	23	22
Gas Holding[b]							
Amount (000)	$0	$4,995	$55,286	$11,311	$169	$0	$37,000
No. of Issues	0	5	4	2	1	0	1

a. See Footnote "b", Table 120 for description of securities included and the derivation of stated amounts.
b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

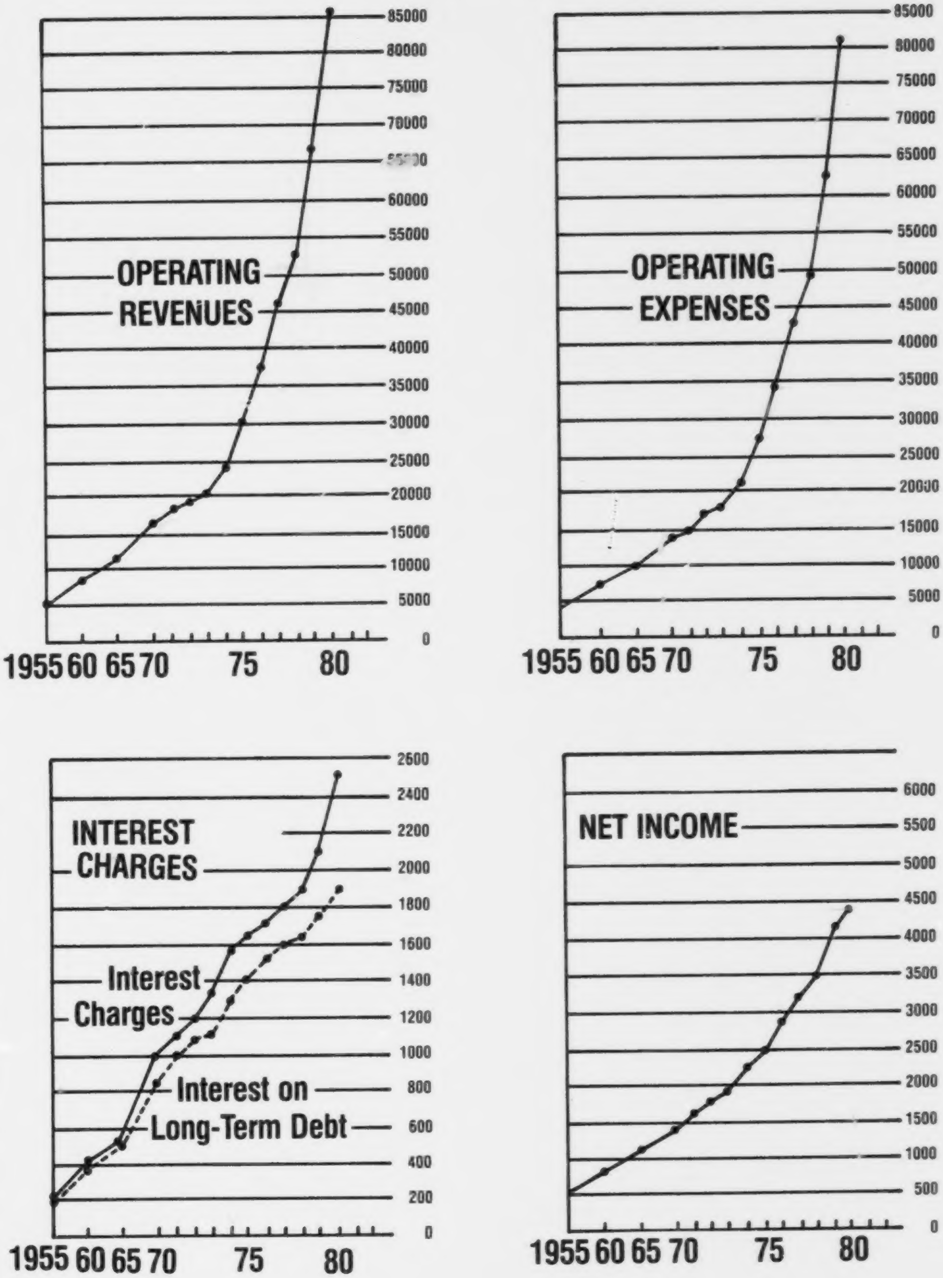
SECTION XII
FINANCE
PART 2. INCOME ACCOUNTS

	1980	% Change 80/79
Total Operating Revenues (Millions)		
Total Industry	$85,807	+28.2
Distribution	13,984	+18.8
Transmission	41,574	+39.0
Integrated	17,213	+19.2
Combination	13,036	+20.6
Net Income (Millions)		
Total Industry	$ 4,377	+ 4.0
Distribution	452	−12.7
Transmission	2,514	+ 7.0
Integrated	837	+ 3.7
Combination	574	+ 7.7

CHART 19

COMPOSITE INCOME ACCOUNTS GAS UTILITY INDUSTRY (INVESTOR-OWNED)

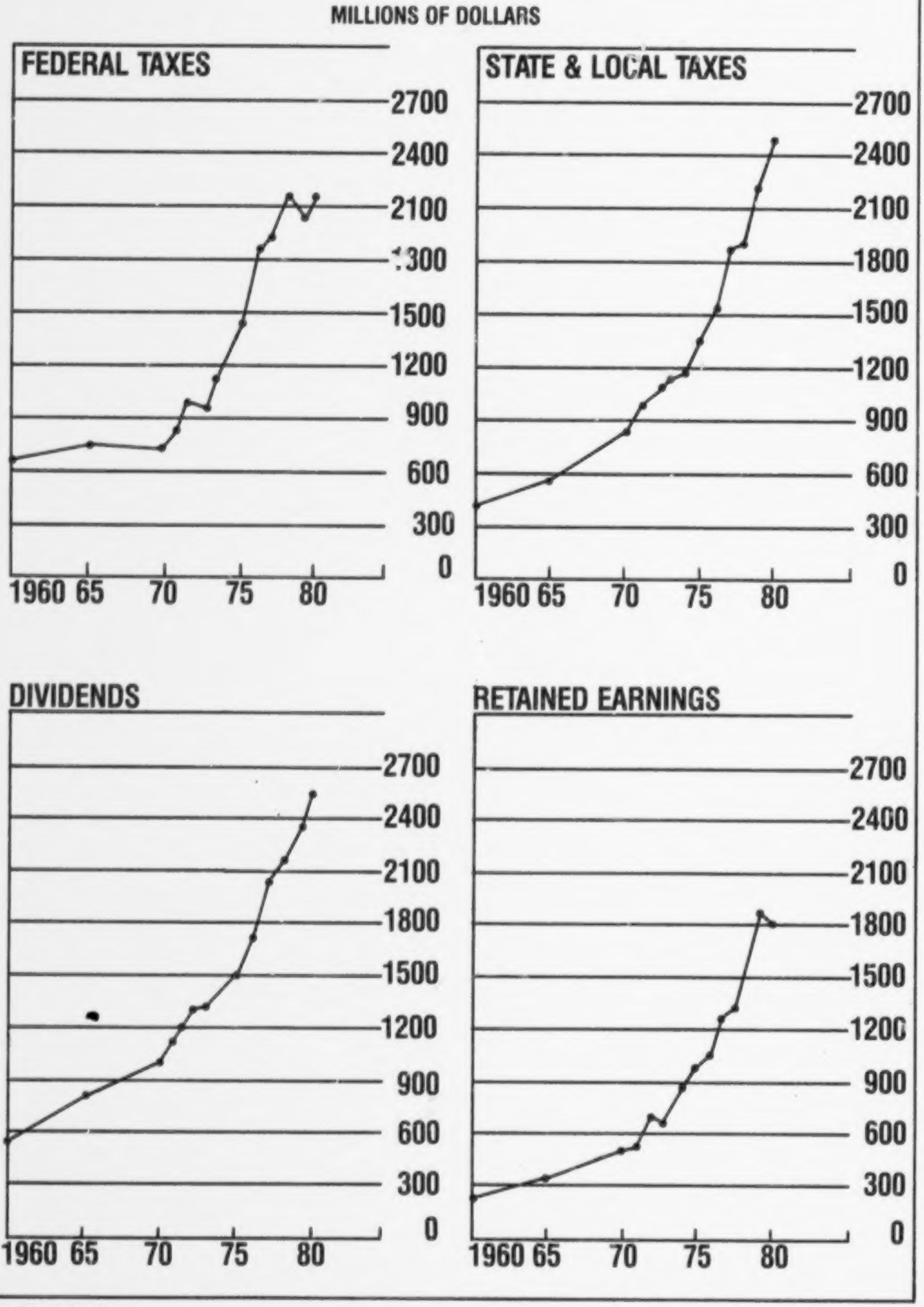
MILLIONS OF DOLLARS



REFERENCE: TABLE 132

CHART 20

GAS UTILITY INDUSTRY DISPOSITION OF NET INCOME AND TAXES (INVESTOR-OWNED)



REFERENCE: TABLE 132

TABLE 132
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TOTAL INDUSTRY[a] 1955–1980

(Millions)

	1955	1960	1965	1970	1975	1979	1980
Total Operating Revenues	$5,063	$8,696	$11,525	$16,380	$30,550	$66,931	$85,807
Operation Expenses	3,193	5,689	7,657	11,205	[illegible]2,254	55,185	73,229
Maintenance Expenses	190	262	316	431	703	1,096	1,204
Total Operation and Maintenance Expenses	3,383	5,951	7,973	11,636	22,957	56,281	74,433
Depreciation, Retirements, Depletion, etc.	349	578	798	1,101	1,760	2,311	2,431
Federal Income Taxes[b]		540	633	605	965	1,006	1,375
Provision for Deferred Federal Income Taxes	409				465	1,732	1,948
Portion of Current Federal Income Taxes Provided For in Prior Years		79	45	34	(252)	(989)	(1,587)
Investment Tax Credit Adjustment	b	b	b	b	130	151	210
Other Federal Taxes	13	22	27	55	109	178	201
State Income Taxes	14	23	26	46	116	164	196
Other State and Local Taxes	230	394	561	829	1,230	2,052	2,310
Total Taxes	666	1,058	1,292	1,569	2,763	4,294	4,653
Total Operating Expenses	4,398	7,587	10,063	14,306	27,480	62,887	81,517
Operating Income	665	1,109	1,462	2,074	3,070	4,043	4,290
Other Operating Income	2	3	7	12	21	13	23
Allowance for Funds Used During Construction	15	25	34	73	130	240	320
Utility Operating Income	682	1,137	1,503	2,159	3,221	4,296	4,633
Other Income (Non-Operating) (Net)[c]	48	110	157	298	916[d]	2,007[d]	2,479[d]
Income Before Interest Charges	730	1,247	1,660	2,457	4,137[d]	6,303[d]	7,112[d]
Interest on Long-Term Debt	197	374	499	867	1,423	1,763	1,959
Amortization of Debt Disc. Exp. and Premium	2	2	5	9	12	15	15
Other Interest Expense (Net)	22	41	49	154	203	384	622
Total Interest Charges	221	417	553	1,030	1,638	2,163	2,596
Net Income Before Extraordinary Items	e	e	e	e	2,499[d]	4,140[d]	4,516[d]
Extraordinary Items, Less Taxes	c	c	c	c	3	68	(139)
Net Income	509	830	1,107	1,427	2,502[d]	4,208[d]	4,377[d]
Preferred Dividends	41	69	78	129	184	266	297
Common Dividends	335	512	703	877	1,325	2,096	2,269
Note:							
Number of Companies Reporting[f]	267	310	304	291	204	180	197
Op. Rev. of Companies Reporting (Millions)	$4,365	$8,112	$10,751	$15,776	$29,057	$58,724	$79,233

a. For combination companies, only gas operations are included.
b. "Investment Tax Credit Adjustment" included in "Federal Income Taxes" prior to 1971.
c. "Extraordinary Items" included in "Other Income (Non-Operating) (Net)" prior to 1971.
d. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
e. Not available.
f. Financial data of report companies expanded to represent total industry on the basis of operating revenues. As of 1971 total number of sample companies limited to companies with operating revenues over $3,000,000.
( ):Denotes negative.

INCOME ACCOUNTS

TABLE 133
COMPOSITE INCOME ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY DISTRIBUTION COMPANIES, 1974–1980

(Millions)

	1974	1975	1976[a]	1977	1978	1979	1980
Total Operating Revenues	$4,874	$5,938	$7,375	$8,705	$9,936	$11,767	$13,984
Operation Expenses	3,484	4,333	5,613	6,696	7,766	9,410	11,517
Maintenance Expenses	142	165	179	206	213	233	251
Total Operation and Maintenance Expenses	3,625	4,498	5,792	6,902	7,979	9,643	11,768
Depreciation, Retirements, Depletion, etc.	217	246	270	284	299	315	336
Federal Income Taxes	105	117	139	206	218	209	192
Provision for Deferred Federal Income Taxes	46	67	72	77	91	106	97
Portion of Current Federal Income Taxes Provided For in Prior Years	(3)	(6)	(28)	(26)	(19)	(30)	(43)
Investment Tax Credit Adjustment	18	26	35	35	34	32	53
Other Federal Taxes	28	30	32	35	39	45	50
State Income Taxes	12	17	16	20	25	26	33
Other State and Local Taxes	349	414	476	554	615	668	750
Total Taxes	555	665	742	901	1,001	1,056	1,132
Total Operating Expenses	4,397	5,409	6,804	8,087	9,279	11,014	13,236
Operating Income	478	529	571	618	657	753	748
Other Operating Income	4	4	2	1	2	2	3
Allowance for Funds Used During Construction	13	8	7	3	3	5	8
Utility Operating Income	494	541	580	622	662	760	759
Other Income (Non-Operating)(Net)	23	21	21	24	38	56	50
Income Before Interest Charges	517	562	601	646	700	816	809
Interest on Long-Term Debt	184	213	224	225	233	252	277
Amortization of Debt Disc. Exp. and Premium	1	2	2	2	2	2	2
Other Interest Expense (Net)	45	34	27	23	33	48	79
Total Interest Charges	230	249	253	250	267	303	358
Net Income Before Extraordinary Items	288	313	348	396	433	513	451
Extraordinary Items, Less Taxes	b	3	(4)	4	b	5	1
Net Income	288	316	344	400	433	518	452
Preferred Dividends	19	21	25	23	24	27	30
Common Dividends	201	212	217	259	273	333	328
Note:							
Number of Companies Reporting	56	57	55	53	53	51	56
Op. Rev. of Companies Reporting (Millions)	$4,674	$5,572	$6,773	$8,305	$9,936	$10,747	$12,942

a. Data not directly comparable to previous years due to reclassification of several companies.
b. Less than $500,000.
( ): Denotes negative.

TABLE 134
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TRANSMISSION COMPANIES, 1955-1980

(Millions)

	1955	1960	1965	1970[a]	1975	1979	1980
Total Operating Revenues	$1,655	$3,190	$4,088	$5,928	$11,898	$22,919	$41,574
Operation Expenses	980	2,031	2,747	4,094	8,463	24,923	36,030
Maintenance Expenses	39	64	78	109	187	336	405
Total Operation and Maintenance Expenses	1,019	2,095	2,825	4,203	8,650	25,259	36,435
Depreciation, Retirements, Depletion, etc.	159	284	357	509	896	1,186	1,240
Federal Income Taxes[c]		163	212	200	646	606	848
Provision for Deferred Federal Income Taxes	140				246	1,130	1,432
Portion of Current Federal Income Taxes		56	13	(9)			
Provided For in Prior Years					(221)	(789)	(1,249)
Investment Tax Credit Adjustment	b	b	b	b	48	53	77
Other Federal Taxes	2	4	5	11	22	41	52
State Income Taxes	4	8	8	12	52	60	88
Other State and Local Taxes	46	88	117	162	221	490	574
Total Taxes	192	319	355	376	1,014	1,591	1,822
Total Operating Expenses	1,370	2,698	3,537	5,088	10,560	28,036	39,497
Operating Income	285	492	551	840	1,338	1,882	2,077
Other Operating Income	c	c	c	c	c	c	3
Allowance for Funds Used During Construction	8	11	18	24	38	84	127
Utility Operating Income	293	503	569	864	1,376	1,966	2,207
Other Income (Non-Operating) (Net)[d]	14	32	70	190	640[e]	1,473[e]	1,767[e]
Income Before Interest Charges	307	535	639	1,054	2,016[e]	3,439[e]	3,974[e]
Interest on Long-Term Debt	98	195	237	414	643	858	984
Amortization of Debt Disc. Exp. and Premium	1	2	4	7	7	8	8
Other Interest Expense (Net)	8	21	20	70	110	223	326
Total Interest Charges	107	218	261	491	760	1,089	1,318
Net Income Before Extraordinary Items	f	f	f	f	1,256[e]	2,350[e]	2,656[e]
Extraordinary Items, Less Taxes	d	d	d	d	0	0	(142)
Net Income	200	317	378	563	1,256[e]	2,350[e]	2,514[e]
Preferred Dividends	18	33	38	79	79	122	144
Common Dividends	119	184	258	351	600	1,120	1,235
Note:							
Number of Companies Reporting	48	48	47	39	33	31	38
Op. Rev. of Companies Reporting (Millions)	$1,608	$3,092	$3,999	$5,729	$11,192	$25,427	$37,666

a. Data not directly comparable to previous years due to reclassification of several companies.
b. "Investment Tax Credit Adjustment" included in "Federal Income Taxes" prior to 1971
c. Less than $500,000.
d. "Extraordinary Items" included in "Other Income (Non-Operating) (Net)" prior to 1971.
e. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
f. Not available.
( ): Denotes negative.

INCOME ACCOUNTS

TABLE 135
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
INTEGRATED COMPANIES, 1974–1980

(Millions)

	1974	1975	1976[a]	1977	1978	1979	1980
Total Operating Revenues	$5,631	$6,962	$7,803	$9,800	$11,266	$14,439	$17,213
Operation Expenses	4,021	5,200	5,998	7,771	9,155	12,116	14,851
Maintenance Expenses	145	157	176	209	231	265	270
Total Operation and Maintenance Expenses	4,165	5,357	6,174	7,980	9,385	12,381	15,121
Depreciation, Retirements, Depletion, etc.	325	345	356	368	407	464	484
Federal Income Taxes	135	188	224	230	180	24	266
Provision for Deferred Federal Income Taxes	79	79	102	103	153	375	211
Portion of Current Federal Income Taxes Provided For in Prior Years	(17)	(15)	(25)	(46)	(64)	(85)	(194)
Investment Tax Credit Adjustment	16	28	31	43	49	37	44
Other Federal Taxes	27	28	31	35	40	48	51
State Income Taxes	24	30	32	33	46	56	49
Other State and Local Taxes	226	244	267	323	349	401	437
Total Taxes	490	582	662	721	752	857	864
Total Operating Expenses	4,980	6,284	7,192	9,070	10,544	13,702	16,469
Operating Income	652	678	611	730	722	737	744
Other Operating Income	14	17	14	11	9	11	17
Allowance for Funds Used During Construction	8	10	9	8	10	12	17
Utility Operating Income	673	705	634	749	741	760	778
Other Income (Non-Operating) (Net)	224	231	292	268	257	433	591
Income Before Interest Charges	896	936	926	1,017	998	1,193	1,369
Interest on Long-Term Debt	309	321	336	335	341	356	368
Amortization of Debt Disc. Exp. and Premium	3	3	2	4	3	3	3
Other Interest Expense (Net)	51	39	30	29	54	90	161
Total Interest Charges	363	363	368	368	398	449	532
Net Income Before Extraordinary Items	533	573	558	649	600	744	837
Extraordinary Items, Less Taxes	0	2	5	b	1	63	b
Net Income	533	575	563	649	601	807	837
Preferred Dividends	19	22	21	32	35	35	34
Common Dividends	279	336	403	353	366	392	420
Note:							
Number of Companies Reporting	47	49	46	41	43	40	42
Op. Rev. of Companies Reporting (Millions)	$5,148	$6,622	$7,049	$9,317	$10,261	$12,180	$15,644

a. Data not directly comparable to previous years due to reclassification of several companies.
b. Less than $500,000.
( ): Denotes negative.

TABLE 136
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
COMBINATION COMPANIES, 1974–1980

(Millions)

	1974	1975	1976	1977	1978	1979	1980
	Gas Operations						
Total Operating Revenues	$ 4,605	$ 5,753	$ 7,023	$ 7,968	$ 8,804	$10,806	$13,036
Operation Expenses	3,234	4,259	5,223	6,179	6,871	8,737	10,831
Maintenance Expenses	183	195	204	236	231	262	278
Total Operations and Maintenance Expenses	3,417	4,454	5,427	6,415	7,102	8,998	11,109
Depreciation, Retirements, Depletion, etc.	251	273	296	313	321	346	371
Federal Income Taxes	55	14	134	85	167	167	69
Provision for Deferred Federal Income Taxes	35	74	56	130	110	121	208
Portion of Current Federal Income Taxes Provided For in Prior Years	(7)	(10)	(22)	(72)	(69)	(85)	(101)
Investment Tax Credit Adjustment	4	28	44	27	25	29	36
Other Federal Taxes	27	29	31	33	37	44	48
State Income Taxes	5	17	20	17	18	22	26
Other State and Local Taxes	314	351	406	438	453	493	549
Total Taxes	433	503	669	658	741	790	835
Total Operating Expenses	4,100	5,230	6,392	7,386	8,164	10,135	12,315
Operating Income[a]	505	523	631	582	641	671	721
	Total Operations						
Total Operating Revenues	$19,098	$22,831	$25,444	$28,781	$30,695	$36,232	$43,732
Operation Expenses	10,828	13,060	14,656	17,213	18,342	22,632	28,488
Maintenance Expenses	1,089	1,193	1,305	1,504	1,672	2,019	2,305
Total Operation and Maintenance Expenses	11,917	14,253	15,961	18,717	20,013	24,651	30,793
Depreciation, Retirements, Depletion, etc.	1,558	1,748	1,858	1,953	2,082	2,349	2,591
Federal Income Taxes	140	241	260	404	470	350	538
Provision for Deferred Federal Income Taxes	287	399	456	610	833	963	1,364
Portion of Current Federal Income Taxes Provided For in Prior Years	(48)	(87)	(116)	(256)	(379)	(334)	(749)
Investment Tax Credit Adjustment	51	220	474	427	430	334	302
Other Federal Taxes	111	118	125	136	152	196	227
State Income Taxes	64	94	106	107	132	140	164
Other State and Local Taxes	1,811	2,036	2,211	2,369	2,422	2,605	2,903
Total Taxes	2,416	3,021	3,516	3,797	4,061	4,253	4,749
Total Operating Expenses	15,891	19,022	21,335	24,467	26,157	31,253	38,133
Operating Income	3,207	3,809	4,109	4,314	4,538	4,979	5,599
Other Operating Income	5	6	7	8	b	b	b
Allowance for Funds Used During Construction	617	626	663	775	887	1,231	1,567
Utility Operating Income	3,829	4,441	4,779	5,097	5,425	6,209	7,166
Other Income (Non-Operating)(Net)	127	152	188	179	247	302	495
Income before Interest Charges	3,956	4,593	4,967	5,276	5,672	6,511	7,661
Interest on Long-Term Debt	1,586	1,885	1,998	2,104	2,238	2,594	3,035
Amortization of Debt Disc. Exp. and Premium	4	8	9	12	14	15	15
Other Interest Expense (Net)	255	171	102	103	119	188	452
Total Interest Charges	1,845	2,064	2,109	2,219	2,370	2,796	3,502
Net Income Before Extraordinary Items	2,111	2,529	2,858	3,057	3,302	3,715	4,159
Extraordinary Income Less Taxes	55	(25)	0	0	0	0	10
Net Income	2,166	2,504	2,858	3,057	3,302	3,715	4,169
Preferred Dividends	427	494	552	591	637	708	801
Common Dividends	1,173	1,343	1,492	1,630	1,828	2,183	2,556
Note:							
Number of Companies Reporting	66	65	63	60	61	58	61
Total Op. Revenues of Companies Reporting (Millions)	$18,884	$22,506	$24,925	$27,803	$30,370	$34,771	$43,548
Gas Revenues of Companies Reporting (Millions)	$ 4,554	$ 5,671	$ 6,880	$ 7,697	$ 8,711	$10,370	$12,981

a. Includes "Other Operating Income" which was less than $500,000 in each year.
b. Less than $500,000.
( ): Denotes negative.

TABLE 137
INVESTOR-OWNED GAS UTILITY INDUSTRY GAS OPERATION AND MAINTENANCE EXPENSES BY TYPE OF COMPANY, 1979–1980

(Millions)

	1979		1980	
Total Industry Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$47,201	$ 0	$63,957	$ 0
Other Production and Purch. Exp. and Adjustments	1,060	129	999	154
Production and Purchases, Total	48,261	129	64,956	154
Storage	403	67	415	71
Transmission	2,182	292	2,755	350
Distribution	1,075	565	1,493	622
Customer accounts	827	a	940	a
Sales	116	a	183	3
Administrative and General	2,142	43	2,373	4
Customer Service	180	a	114	a
Total	55,186	1,096	73,229	1,204
Distribution Companies Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$ 7,661	$ 0	$ 9,610	$ 0
Other Production and Purch. Exp. and Adjustments	443	9	346	9
Production and Purchases, Total	8,104	9	9,956	9
Storage	42	9	52	9
Transmission	11	6	18	8
Distribution	418	198	553	224
Customer accounts	319	a	363	a
Sales	42	a	44	a
Administrative and General	446	11	495	1
Customer Service	28	a	36	a
Total	9,410	233	11,517	251
Transmission Companies Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$21,755	$ 0	$32,268	$ 0
Other Production and Purch. Exp. and Adjustments	482	80	384	101
Production and Purchases, Total	22,237	80	32,652	101
Storage	207	27	213	28
Transmission	1,740	224	2,258	276
Distribution	0	0	a	a
Customer accounts	5	0	7	0
Sales	5	0	6	0
Administrative and General	727	5	892	0
Customer Service	2	0	2	0
Total	24,923	336	36,030	405
Integrated Companies Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$10,290	$ 0	$12,797	$ 0
Other Production and Purch. Exp. and Adjustments	60	28	216	29
Production and Purchase, Total	10,350	28	13,013	29
Storage	105	22	104	24
Transmission	360	49	403	52
Distribution	363	155	407	159
Customer accounts	273	a	285	a
Sales	61	a	125	3
Administrative and General	527	11	489	3
Customer Service	77	0	25	0
Total	12,116	265	14,851	270
Combination Companies Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$ 7,495	$ 0	$ 9,282	$ 0
Other Production and Purch. Exp. and Adjustments	75	12	53	15
Production and Purchases, Total	7,570	12	9,335	15
Storage	49	9	46	10
Transmission	71	13	76	14
Distribution	294	212	533	239
Customer accounts	230	0	285	0
Sales	8	a	8	0
Administrative and General	442	16	497	0
Customer Service	73	0	51	0
Total	8,737	262	10,831	278

a. Less than $500,000.
b. Not available.

TABLE 130

GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF DEBENTURE ISSUES

1974–1980[a]

	1974		1975		1976		1977		1978		1979		1980	
	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield	Cost	Yield
Total														
Average	9.48	9.40	10.28	10.17	8.88	8.81	8.74	8.63	9.26	9.12	10.81	10.65	13.07	12.97
Weighted Average	9.34	9.25	10.31	10.20	8.87	8.80	8.36	8.29	9.02	8.89	11.12	11.04	12.67	12.57
Sample Amount (000)		$535,000		$801,000		$735,000		$265,000		$150,000		$645,000		$925,000
Distribution														
Average	9.34	9.25	0.00	0.00	0.00	0.00	7.36	7.28	0.00	0.00	9.93	9.88	0.00	0.00
Weighted Average	9.34	9.25	0.00	0.00	0.00	0.00	7.36	7.28	0.00	0.00	9.93	9.88	0.00	0.00
Sample Amount (000)		$20,000		$0		$0		$50,000		$0		$40,000		$0
Transmission														
Average	8.91	8.84	10.07	9.99	8.92	8.84	0.00	0.00	0.00	0.00	11.31	11.22	13.89	13.81
Weighted Average	8.95	8.88	10.08	10.00	8.88	8.79	0.00	0.00	0.00	0.00	11.40	11.30	14.10	14.02
Sample Amount (000)		$190,000		$255,000		$270,000		$0		$0		$200,000		$175,000
Integrated														
Average	9.15	9.08	10.06	9.95	8.87	8.79	9.39	9.24	9.69	9.55	10.75	10.68	11.65	11.56
Weighted Average	9.23	9.16	9.85	9.76	8.88	8.80	8.87	8.77	9.21	9.11	10.98	10.94	11.17	11.09
Sample Amount (000)		$140,000		$230,000		$315,000		$100,000		$80,000		$215,000		$400,000
Combination Utilities														
Average	0.00	0.00	12.86	12.62	0.00	0.00	0.00	0.00	8.83	8.68	10.92	10.38	14.54	14.39
Weighted Average	0.00	0.00	12.86	12.62	0.00	0.00	0.00	0.00	8.81	8.64	10.92	10.38	14.64	14.48
Sample Amount (000)		$0		$100,000		$0		$0		$70,000		$15,000		$150,000
Gas Holding[b]														
Average	10.19	10.08	10.22	10.11	8.84	8.79	8.44	8.38	0.00	0.00	11.16	11.08	12.93	12.84
Weighted Average	9.82	9.72	9.89	9.80	8.84	8.79	8.36	8.31	0.00	0.00	11.27	11.18	12.93	12.84
Sample Amount (000)		$185,000		$216,000		$150,000		$115,000		$0		$175,000		$200,000

a. Includes only those issues in Table 129 for which necessary cost and yield data were available.

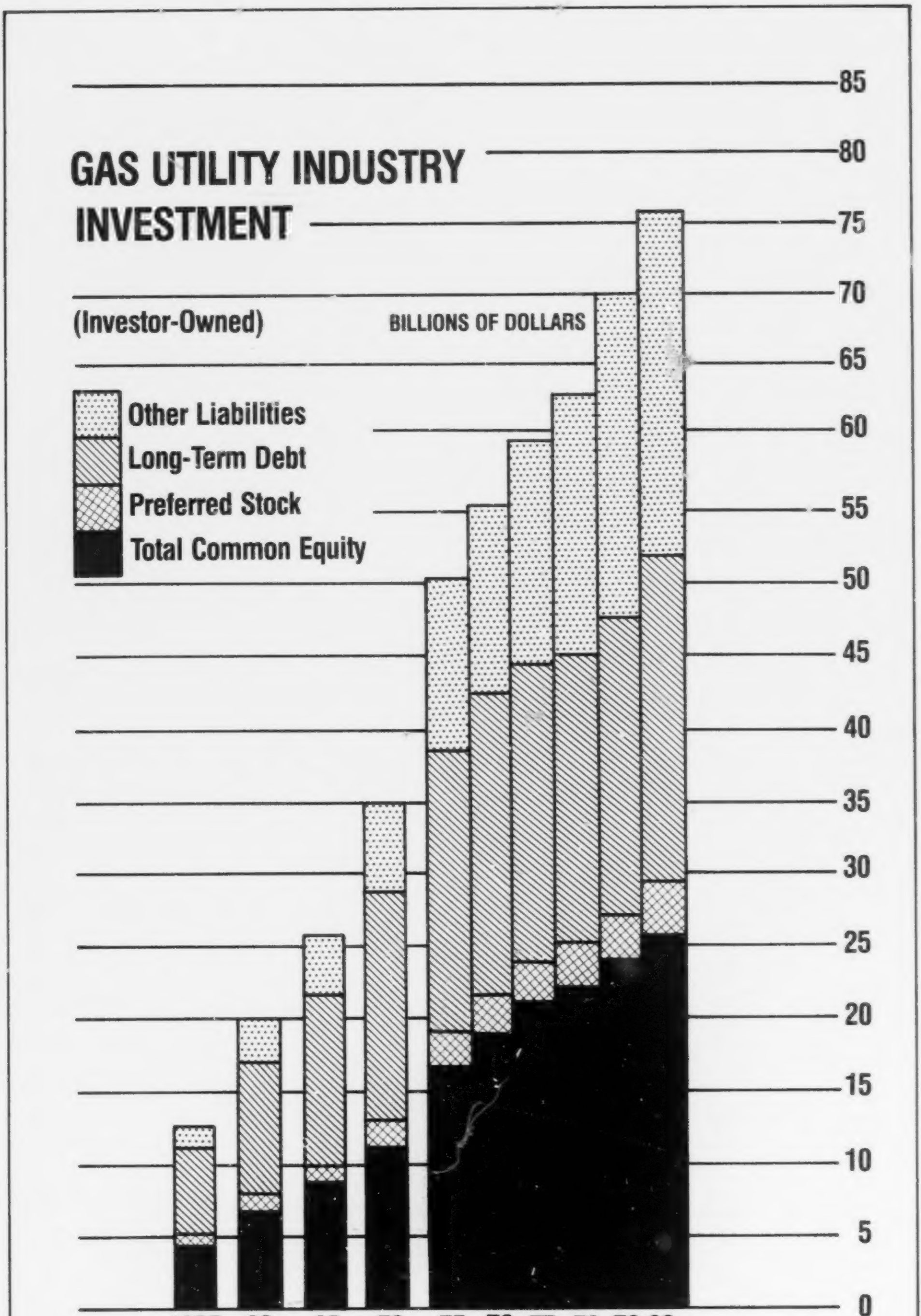
b. A gas holding company is a corporation that is formed for the sole purpose of owning stock in other gas companies. Names of companies included in Footnote "a" of Table 120.

Definitions: "Cost" refers to the expenses incurred by a company. It includes dividends, underwriter fees, plus discount expenses less premiums.
"Yield" is the rate of return on investment by a buyer.

SECTION XII
FINANCE
PART 3. BALANCE SHEETS

	1980	% Change 80/79
Gas Utility Plant (Millions)		
Total Industry	$66,767	+ 6.5
Distribution	10,956	+ 7.8
Transmission	30,433	+ 10.1
Integrated	13,348	− 1.5
Combination	12,030	+ 6.1
Total Common Equity (Millions)		
Total Industry	$25,632	+ 7.8
Distribution	3,292	+ 4.2
Transmission	14,071	+ 11.7
Integrated	5,150	+ 1.6
Combination	3,119	+ 5.9

CHART 21



REFERENCE: TABLE 138

BALANCE SHEETS

TABLE 138
COMPOSITE BALANCE SHEET ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY TOTAL INDUSTRY, 1955–1980

(Millions)

	1955	1960	1965	1970	1975	1979	1980
ASSETS							
Total Gas Utility Plant	$13,305	$20,835	$28,205	$38,541	$49,384	$62,710	$66,767
Less Accum. Prov. for Depr. and Amort.	2,775	4,570	7,205	10,696	16,779	24,400	26,062
Net Gas Utility Plant (Total)	10,530	16,265	21,000	27,845	32,605	38,310	40,705
Investment and Fund Accounts	525	1,380	1,885	3,024	9,198[a]	14,097[a]	15,625[a]
Current and Accrued Assets	1,465	2,185	2,545	3,674	7,543	15,427	17,211
Deferred Debits[b]	140	170	210	386	940	2,411	2,184
Total Assets	12,660	20,000	25,640	34,929	50,286[a]	70,245[a]	75,725[a]
LIABILITIES							
Common Stock	2,600	3,540	4,360	4,727	5,803	6,732	6,973
Retained Earnings	1,040	1,880	2,715	4,230	7,911[a]	12,258[a]	13,060[a]
Other Paid-in Capital[c]	645	1,045	1,390	2,063	3,245	4,781	5,599
Total Common Equity	4,285	6,465	8,465	11,020	16,959[a]	23,771[a]	25,632[a]
Preferred Stock	860	1,345	1,540	1,945	2,541	3,363	3,630
Total Capital Stock	5,145	7,810	10,005	12,965	19,500[a]	27,135[a]	29,262[a]
Bonds	4,315	6,265	7,525	9,248	10,493	9,444	9,533
Debentures	830	1,445	2,560	4,274	5,174	5,253	5,866
Other Long-Term Debt	755	1,420	1,430	2,159	3,877	6,333	6,638
Total Long-Term Debt	5,900	9,130	11,515	15,681	19,544	21,030	22,037
Total Capitalization	11,045	16,940	21,520	28,646	39,044[a]	48,165[a]	51,299[a]
Current and Accrued Liabilities	1,390	2,420	3,035	4,832	8,158	16,024	18,107
Deferred Credits	80	85	215	370	752	1,514	1,655
Operating Reserves	95[d]	110	55	48	194	666	434
Contributions in Aid of Construction	50	95	155	245	86	77	95
Reserves for Deferred Income Taxes	d	350	660	788	207	535	598
Accumulated Deferred Income Taxes					1,845	3,263	3,537
Total Liabilities	12,660	20,000	25,640	34,929	50,286[a]	70,245[a]	75,725[a]

a. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
b. Includes "Capital Stock Discount and Expense" and "Reacquired Securities."
c. Includes accounts formerly detailed in "Premiums, Assessments, etc." and "Capital Surplus."
d. "Reserves for Deferred Income Taxes" included in "Operating Reserves."

TABLE 139
COMPOSITE BALANCE SHEET ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY DISTRIBUTION COMPANIES, 1974-1980

(Millions)

	1974	1975	1976*	1977	1978	1979	1980
ASSETS							
Total Gas Utility Plant	$8,073	$8,547	$9,013	$9,153	$9,619	$10,166	$10,956
Less Accum. Prov. for Depr. and Amort.	1,892	2,075	2,328	2,465	2,690	2,892	3,165
Net Gas Utility Plant (Total)	6,181	6,472	6,685	6,688	6,929	7,274	7,791
Investment and Fund Accounts	203	223	241	286	356	464	446
Current and Accrued Assets	1,074	1,379	1,772	1,850	1,935	2,454	3,076
Deferred Debits	86	138	141	126	167	191	127
Total Assets	7,543	8,212	8,839	8,950	9,387	10,383	11,440
LIABILITIES							
Common Stock	1,027	1,110	1,035	1,042	1,064	1,108	1,115
Retained Earnings	1,054	1,157	1,182	1,246	1,388	1,531	1,626
Other Paid-in Capital	331	337	488	489	485	519	551
Total Common Equity	2,412	2,604	2,705	2,777	2,937	3,158	3,292
Preferred Stock	315	330	350	299	355	378	410
Total Capital Stock	2,727	2,934	3,055	3,076	3,292	3,536	3,702
Bonds	1,965	2,190	2,375	2,297	2,228	2,125	2,185
Debentures	264	312	304	145	127	121	98
Other Long-Term Debt	575	575	638	630	701	874	847
Total Long-Term Debt	2,803	3,077	3,317	3,072	3,056	3,120	3,130
Total Capitalization	5,530	6,011	6,372	6,148	6,348	6,656	6,832
Current and Accrued Liabilities	1,584	1,640	1,820	2,018	2,125	2,701	3,380
Deferred Credits	127	161	208	272	302	350	461
Operating Reserves	10	13	14	17	20	23	29
Contributions in Aid of Construction	58	56	39	44	51	54	65
Reserves for Deferred Income Taxes	97	110	144	168	338	392	426
Accumulated Deferred Income Taxes	138	221	243	283	203	207	247
Total Liabilities	7,543	8,212	8,840	8,950	9,387	10,383	11,440

*Data not directly comparable to previous years due to reclassification of several companies.

TABLE 140
COMPOSITE BALANCE SHEET ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY TRANSMISSION COMPANIES, 1955-1980

(Millions)

	1955	1960	1965	1970[a]	1975	1979	1980
ASSETS							
Total Gas Utility Plant	$5,190	$8,960	$11,505	$16,363	$20,351	$27,653	$30,433
Less Accum. Prov. for Depr. and Amort.	985	2,040	3,375	5,311	8,636	13,335	14,408
Net Gas Utility Plant (Total)	4,205	6,920	8,130	11,052	11,714	14,318	16,025
Investment and Fund Accounts	215	870	1,060	1,889	6,791[b]	10,807[b]	12,082[b]
Current and Accrued Assets	535	840	950	1,384	3,459	8,253	8,437
Deferred Debits[c]	30	65	100	192	516	1,639	1,381
Total Assets	4,985	8,695	10,240	14,517	22,480[b]	35,016[b]	37,925[b]
LIABILITIES							
Common Stock	655	1,105	1,225	1,477	1,984	2,569	2,619
Retained Earnings	365	665	815	1,430	4,010[b]	7,215[b]	8,027[b]
Other Paid-in Capital[d]	290	570	770	1,233	1,891	2,815	3,425
Total Common Equity	1,310	2,340	2,810	4,140	7,885[b]	12,600[b]	14,071[b]
Preferred Stock	365	640	715	1,019	1,012	1,515	1,746
Total Capital Stock	1,675	2,980	3,525	5,159	8,897[b]	14,115[b]	15,817[b]
Bonds	2,120	3,030	3,060	3,458	3,125	2,374	2,416
Debentures	435	770	1,545	2,569	3,124	3,262	3,758
Other Long-Term Debt	185	590	420	841	2,167	3,962	4,104
Total Long-Term Debt	2,740	4,390	5,025	6,868	8,415	9,599	10,278
Total Capitalization	4,415	7,370	8,550	12,027	17,312[b]	23,713[b]	26,095[b]
Current and Accrued Liabilities	500	1,005	1,200	1,974	3,802	8,367	9,092
Deferred Credits	25	10	65	147	295	524	491
Operating Reserves	40[e]	65	15	14	113	487	176
Contributions in Aid of Construction	5	15	20	14	0	1	9
Reserves for Deferred Income Taxes	e	230	390	341	2	18	110
Accumulated Deferred Income Taxes					957	1,906	1,952
Total Liabilities	4,985	8,695	10,240	14,517	22,480[b]	35,016[b]	37,925[b]

a. Data for prior years not directly comparable to later years due to reclassification of several companies from Integrated to Transmission. For definitions of companies, refer to Glossary.

b. Not comparable with 1970 and prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.

c. Includes "Capital Stock Discount and Expense" and "Reacquired Securities." Subsequent to 1955, "Reacquired Securities" are deducted from the appropriate capital account.

d. Includes accounts formerly detailed in "Premiums, Assessments, etc." and "Capital Surplus."

e. "Reserves For Deferred Income Taxes" and "Accumulated Deferred Income Taxes" included in "Operating Reserves."

TABLE 141
COMPOSITE BALANCE SHEET ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY INTEGRATED COMPANIES, 1974–1980

(Millions)

	1974	1975	1976*	1977	1978	1979	1980
ASSETS							
Total Gas Utility Plant	$10,887	$10,960	$11,375	$11,881	$12,659	$13,551	$13,348
Less Accum. Prov. for Depr. and Amort.	3,489	3,635	3,889	4,091	4,472	4,725	4,767
Net Gas Utility Plant (Total)	7,398	7,325	7,486	7,790	8,187	8,826	8,581
Investment and Fund Accounts	1,717	2,086	1,940	2,109	2,175	2,603	2,877
Current and Accrued Assets	1,649	1,899	2,034	2,223	2,623	3,558	4,421
Deferred Debits	156	177	244	228	304	384	459
Total Assets	10,920	11,487	11,704	12,350	13,289	15,370	16,338
LIABILITIES							
Common Stock	1,477	1,563	1,699	1,638	1,676[R]	1,758	1,906
Retained Earnings	1,774	1,865	1,904	2,193	2,231	2,484	2,337
Other Paid-in Capital	514	567	606	626	818	825	907
Total Common Equity	3,765	3,995	4,209	4,457	4,726[R]	5,067	5,150
Preferred Stock	213	254	227	330	418[R]	448	406
Total Capital Stock	3,978	4,249	4,436	4,787	5,144	5,515	5,556
Bonds	1,809	1,850	2,072	1,887	1,714	1,667	1,549
Debentures	1,458	1,622	1,575	1,800	1,709	1,763	1,911
Other Long-Term Debt	1,086	962	834	708	849	1,163	1,303
Total Long-Term Debt	4,353	4,434	4,481	4,395	4,272	4,593	4,763
Total Capitalization	8,331	8,683	8,917	9,182	9,416	10,108	10,319
Current and Accrued Liabilities	1,838	1,991	1,902	2,213	2,678	3,852	4,411
Deferred Credits	178	173	228	246	328	328	366
Operating Reserves	57	63	65	91	142	146	223
Contributions in Aid of Construction	22	23	10	11	15	19	19
Reserves for Deferred Income Taxes	56	66	76	50	62	70	61
Accumulated Deferred Income Taxes	438	488	506	557	648[R]	847	939
Total Liabilities	10,920	11,487	11,704	12,350	13,289	15,370	16,338

*Data not directly comparable to previous years due to company reclassification.
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BALANCE SHEETS

TABLE 142
COMPOSITE BALANCE SHEET ACCOUNTS INVESTOR-OWNED GAS UTILITY INDUSTRY COMBINATION COMPANIES, 1974–1980

(Millions)

	1974	1975	1976	1977	1978	1979	1980
ASSETS							
Gas Utility Plant	$ 9,162	$ 9,526	$ 9,780	$10,186	$10,408	$11,340	$ 12,030
Less Accum. Prov. for Depr. and Amort.	2,240	2,432	2,632	2,908	3,058	3,447	3,722
Net Gas Utility Plant (Total)	6,922	7,094	7,148	7,278	7,349	7,894	8,308
Electric Utility Plant	55,754	60,575	64,382	68,666	73,616	84,564	94,464
Less Accum. Prov. for Depr. and Amort.	11,050	12,193	13,156	14,223	15,531	17,898	20,146
Net Electric Utility Plant (Total)	44,704	48,382	51,226	54,443	58,084	66,666	74,318
Other	2,118	2,142	2,299	2,260	2,401	2,770	3,233
Less Accum. Prov. for Depr. and Amort.	528	575	639	644	690	797	905
Net Other (Total)	1,591	1,567	1,660	1,616	1,711	1,974	2,328
Investment and Fund Accounts	709	741	835	1,219	1,499	1,944	2,009
Current and Accrued Assets	5,154	6,107	7,159	7,924	8,305	10,109	11,656
Deferred Debits	746	830	849	972	1,001	1,715	1,977
Total Assets	59,825	64,721	68,877	73,452	77,949	90,301	100,596
LIABILITIES							
Common Stock	8,621	9,146	9,826	9,726	10,309	12,360	13,385
Retained Earnings	6,434	7,016	7,600	8,277	8,925	9,807	10,740
Other Paid-in Capital	2,695	3,598	3,967	5,031	5,593	5,932	7,193
Total Common Equity	17,750	19,760	21,393	23,034	24,826	28,099	31,318
Preferred Stock	6,814	7,541	7,993	8,403	8,765	9,739	10,723
Total Capital Stock	24,564	27,301	29,386	31,437	33,592	37,837	42,041
Bonds	24,331	26,562	27,435	27,933	28,561	31,252	33,970
Debentures	912	925	844	743	773	1,025	990
Other Long-Term Debts	1,196	1,393	1,280	1,853	2,392	3,186	3,849
Total Long-Term Debts	26,439	28,880	29,559	30,529	31,726	35,464	38,809
Total Capitalization	51,003	56,181	58,945	61,966	65,318	73,301	80,850
Current and Accrued Liabilities	6,795	5,783	6,265	7,055	7,505	10,517	12,263
Deferred Credits	678	985	1,526	1,931	2,288	2,970	3,386
Operating Reserves	49	50	47	45	57	81	58
Contributions in Aid of Construction	26	63	57	19	20	26	25
Reserves for Deferred Income Taxes	205	233	275	535	475	529	7
Accumulated Deferred Income Taxes	1,069	1,426	1,762	1,901	2,286	2,878	4,007
Total Liabilities	59,825	64,721	68,877	73,452	77,949	90,301	100,596

TABLE 143
TOTAL GAS UTILITY INDUSTRY PLANT, BY TYPE OF COMPANY AND BY PLANT FUNCTION, 1955–1980

(Millions)

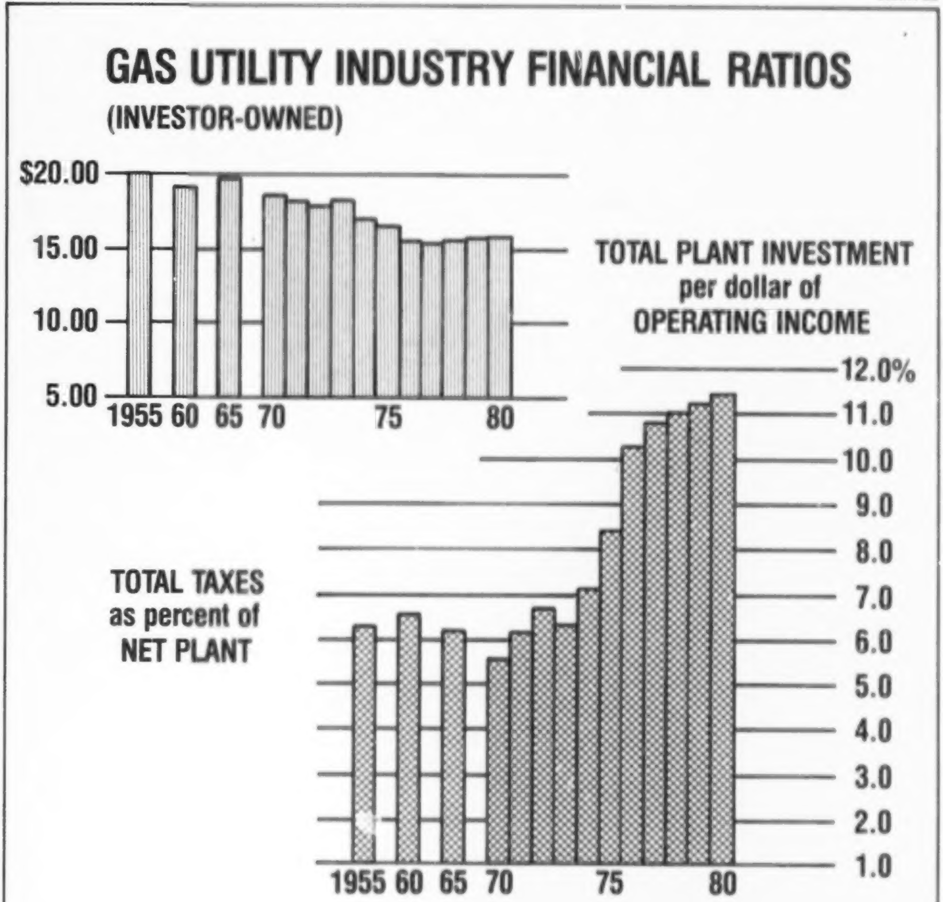
	1955	1960	1965	1970	1975	1979	1980
Total Industry							
Total Gas Utility Plant	$13,750	$21,525	$29,175	$39,914	$51,004	$64,474	$68,983
Production	1,920	2,925	3,180	3,657	4,776	7,072	8,014
Underground Storage	395	755	1,200	1,816	2,697	3,963	4,510
Other Storage	a	a	a	a	700	753	677
LNG	c	c	c	c	c	331	283
Transmission	5,960	9,410	12,435	17,188	20,530	23,265	25,454
Distribution	4,625	7,275	10,660	15,056	19,151	24,061	24,835
General and Intangible[b]	575	835	1,090	1,518	2,226	3,242	3,439
Construction Work in Progress	275	325	610	679	924	1,787	1,771
Total Investor-Owned Industry							
Total Gas Utility Plant	$13,305	$20,835	$28,205	$38,541	$49,384	$62,710	$66,767
Production	1,835	2,835	3,055	3,529	4,687	6,850	7,849
Underground Storage	395	755	1,190	1,770	2,639	3,960	4,436
Other Storage	a	a	a	a	648	640	635
LNG	c	c	c	c	c	320	271
Transmission	5,960	9,405	12,425	17,170	20,307	24,556	25,365
Distribution	4,310	6,750	9,935	13,989	18,080	22,044	23,193
General and Intangible[b]	545	785	1,020	1,451	2,125	3,114	3,306
Construction Work in Progress	260	305	580	632	896	1,227	1,712
Distribution Companies							
Total Gas Utility Plant	c	c	c	c	$8,547	$10,166	$10,956
Production	c	c	c	c	387	521	526
Underground Storage	c	c	c	c	460	489	627
Other Storage	c	c	c	c	172	231	141
LNG	c	c	c	c	c	84	91
Transmission	c	c	c	c	425	311	332
Distribution	c	c	c	c	6,452	7,892	8,556
General and Intangible[b]	c	c	c	c	479	555	596
Construction Work in Progress	c	c	c	c	173	83	87
Transmission Companies							
Total Gas Utility Plant	$5,190	$8,960	$11,505	$16,363	$20,351	$27,653	$30,433
Production	635	1,430	1,570	1,842	2,650	4,303	5,091
Underground Storage	125	280	325	668	1,299	2,057	2,356
Other Storage	a	a	a	a	113	114	176
LNG	c	c	c	c	c	218	158
Transmission	4,155	6,880	9,040	13,238	15,322	19,218	20,276
Distribution	25	35	5	2	5	4	7
General and Intangible[b]	135	220	260	330	587	1,003	1,210
Construction Work in Progress	115	115	305	283	375	736	1,159
Integrated Companies							
Total Gas Utility Plant	c	c	c	c	$10,960	$13,551	$13,348
Production	c	c	c	c	1,240	1,532	1,751
Underground Storage	c	c	c	c	531	952	930
Other Storage	c	c	c	c	62	116	102
LNG	c	c	c	c	c	9	14
Transmission	c	c	c	c	3,418	3,606	3,295
Distribution	c	c	c	c	4,809	6,042	6,036
General and Intangible[b]	c	c	c	c	748	1,058	996
Construction Work in Progress	c	c	c	c	151	235	224
Combination Companies							
Total Gas Utility Plant	c	c	c	c	$9,526	$11,340	$12,030
Production	c	c	c	c	410	494	481
Underground Storage	c	c	c	c	348	462	523
Other Storage	c	c	c	c	301	179	216
LNG	c	c	c	c	c	8	8
Transmission	c	c	c	c	1,144	1,421	1,462
Distribution	c	c	c	c	6,816	8,106	8,594
General and Intangible[b]	c	c	c	c	310	497	504
Construction Work in Progress	c	c	c	c	197	173	242

a. Included in "Production."
b. Includes plant acquisition adjustments and plant adjustments.
c. Not available.

SECTION XII
FINANCE
PART 4. ANALYTICAL RATIOS

	1980	% Change 80/79
Capitalization Represented by ***(%)***		
Long-term Debt	42.9	−1.8
Preferred Stock	7.1	+1.4
Common Equity	50.0	+1.4

CHART 22



REFERENCE: TABLES 132, 143 & 144

ANALYTICAL RATIOS

TABLE 144
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TOTAL INDUSTRY, 1955-1980

	1955	1960	1965	1970	1975	1979	1980
Earnings							
Utility Operating Income as % of Total Plant	5.1	5.5	5.3	5.6	6.5	6.9	6.9
Utility Operating Income as % of Net Plant	6.5	7.0	7.2	7.8	9.9	11.2	11.4
Operating Revenue as % of Total Plant	38.1	41.7	40.9	42.5	61.9	106.7	128.5
Common Dividend Payout Ratio	71.6	67.3	68.3	67.6	57.2[a]	53.2[a]	55.6[a]
Return on Common Equity	10.9	11.8	12.2	11.8	13.7[a]	16.6[a]	15.9[a]
Return on Average Common Equity	11.2	12.2	12.5	12.2	14.3	17.1	16.5
Return on Net Plant	4.4	4.7	4.9	4.7	7.1	10.3	10.0
Pretax Coverage of:							
Total Interest Expense	6.3	5.5	5.3	3.9	4.2	4.9	4.5
Long-Term Debt Interest Expense	7.0	6.0	5.8	4.5	4.7	6.0	6.0
Allowance for Funds Used During Construction as % of Net Income	2.9	3.0	3.1	5.1	5.2	5.7	7.3
Expenses							
Operating Expenses as % of Operating Revenue	86.9	87.2	87.3	87.3	90.0	94.0	95.0
Maintenance Expenses as % of Total Plant	1.4	1.3	1.1	1.1	1.4	1.7^{R}	1.8
Depreciation Expenses as % of Total Plant	2.6	2.8	2.8	2.9	3.6	3.7	3.6
Depreciation Expenses as % of Depreciable Plant	b	b	b	b	3.6	4.3	4.4
Total Taxes as % of Total Plant	5.0	5.1	4.6	4.1	5.6	6.8^{R}	7.0
Total Taxes as % of Net Plant	6.3	6.5	6.2	5.6	8.5	11.2	11.4
Total Taxes as % of Net Income plus Total Taxes	56.7	56.0	52.4	52.5	53.9[a]	50.5[a]	51.5[a]
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[c]	44.6	39.4	36.4	29.8	30.4[a]	21.6[a]	26.6[a]
Plant							
Total Plant per $ of Total Operating Revenue	2.6	2.4	2.4	2.4	1.6	0.9^{R}	0.8
Net Plant per $ of Total Operating Revenue	2.1	1.9	1.8	1.7	1.1	0.6	0.5
Depreciation Reserve as % of Total Plant	20.9	21.9	25.5	27.8	34.0	38.9	39.0
Depreciation Reserve as % of Depreciable Plant	b	b	b	b	35.8	41.0	47.1
Total Plant per Employee ($000)	68.8	100.9	137.1	182.1	251.6	309.8^{R}	329.4
Capitalization							
Long-term Debt as % of Net Plant	56.0	56.1	54.8	56.3	59.4	54.9	54.1
% Total Capitalization Represented by:							
a. Long-term Debt	53.4	53.9	53.5	54.7	50.1	43.7	42.9
b. Preferred Stock	7.8	7.9	7.2	6.8	6.5	7.0	7.1
c. Common Equity	38.8	38.2	39.3	38.5	43.4	49.3	50.0
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	b	b	b	b	53.8	61.0	55.3
b. Equity Issues	b	b	b	b	11.9	7.4	11.2
c. Debt Issues	b	b	b	b	34.3	31.6	33.5

a. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.

b. Not available.

c. Includes "Investment Tax Credit Adjustment" Prior to 1956, also includes "Provisions for Deferred Federal Income Taxes" and "portion of Current Federal Income Taxes Provided For in Prior Years."

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TABLE 145
SELECTED COMPOSITE ANALYTICAL RATIOS INVESTOR-OWNED GAS UTILITY INDUSTRY DISTRIBUTION COMPANIES, 1974-1980

	1974	1975	1976[a]	1977	1978	1979	1980
Earnings							
Utility Operating Income as % of Total Plant	6.1	6.3	6.4	6.8	6.9	7.5	6.9
Utility Operating Income as % of Net Plant	8.0	8.4	8.7	9.2	9.6	10.4	9.7
Operating Revenue as % of Total Plant	60.4	69.5	81.8	95.1	103.3	115.7	127.6
Common Dividend Payout Ratio	74.7	71.6	68.6	68.7	66.7	67.8	77.7
Return on Common Equity	11.2	11.4	11.9	13.6	13.9	15.5	12.8
Return on Average Common Equity	11.3	13.5	11.9	13.8	14.3	16.1	[illegible].1
Return on Net Plant	4.4	4.6	4.7	5.6	5.9	6.8	5.4
Pretax Interest Coverage of:							
Total Interest Expense	4.7	5.0	5.3	6.2	6.4	6.2	5.4
Long-Term Debt Interest Expense	5.6	5.6	5.8	6.8	7.3	7.4	7.0
Allowance for Funds Used During Construction as % of Net Income	4.5	2.5	2.0	0.8	0.7	1.0	1.8
Expenses							
Operating Expenses as % of Operating Revenue	90.2	91.1	92.3	92.9	93.4	93.6	94.7
Maintenance Expenses as % of Total Plant	1.8	1.9	2.0	2.3	2.2	2.3	2.3
Depreciation Expenses as % of Total Plant	2.7	2.9	2.9	3.1	3.1	3.1	3.1
Depreciation Expenses as % of Depreciable Plant	2.7	2.9	3.0	3.1	3.2	3.2	3.6
Total Taxes as % of Total Plant	6.9	7.8	8.2	9.8	10.4	10.4	10.3
Total Taxes as % of Net Plant	9.0	10.3	11.1	13.5	14.4	14.5	14.5
Total Taxes as % of Net Income plus Total Taxes	65.8	67.7	68.5	69.3	69.8	67.1	71.5
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	29.9	31.1	33.8	37.6	36.8	31.8	35.2
Plant							
Total Plant per $ of Total Operating Revenue	1.7	1.4	1.2	1.1	1.0	0.9	0.8
Net Plant per $ of Total Operating Revenue	1.3	1.1	0.9	0.8	0.7	0.6	0.6
Depreciation Reserve as % of Total Plant	23.4	24.3	25.8	26.9	28.0	28.5	28.9
Depreciation Reserve as % of Depreciable Plant	24.3	25.4	26.6	27.2	28.8	29.4	34.0
Total Plant per Employee ($000)	154.4	166.6	173.7	181.2	189.7	200.1	210.3
Capitalization							
Long-term Debt as % of Net Plant	45.3	47.5	49.6	49.9	44.1	42.9	40.2
% Total Capitalization Represented by:							
a. Long-term Debt	50.7	51.2	52.1	50.0	48.1	46.9	45.8
b. Preferred Stock	5.7	5.5	5.5	4.9	5.6	5.7	6.0
c. Common Equity	43.6	43.3	42.4	45.2	46.3	47.7	48.2
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	c	54.0	59.1	81.5	71.0	61.3	44.9
b. Equity Issues	c	14.3	7.2	1.1	5.3	18.1	0.5
c. Debt Issues	c	31.7	33.7	17.3	23.6	20.6	54.6

a. Data not directly comparable to previous years due to company reclassification.
b. Includes "Investment Tax Credit Adjustment."
c. Not available.

ANALYTICAL RATIOS

TABLE 146
SELECTED COMPOSITE ANALYTICAL RATIOS INVESTOR-OWNED GAS UTILITY INDUSTRY TRANSMISSION COMPANIES, 1955-1980

	1955	1960	1965	1970[a]	1975	1979	1980
Earnings							
Utility Operating Income as % of Total Plant	5.6	5.6	4.9	5.3	6.8	7.1	7.3
Utility Operating Income as % of Net Plant	7.0	7.3	7.0	7.8	11.7	13.7	13.8
Operating Revenue as % of Total Plant	31.9	35.6	35.5	36.2	58.5	108.2	136.6
Common Dividend Payout Ratio	65.4	64.8	75.9	72.5	50.9[b]	50.3[b]	52.1[b]
Return on Common Equity	13.9	12.1	12.1	11.7	14.9[b]	17.7[b]	16.8[b]
Return on Average Common Equity	14.9	12.7	12.3	12.1	15.8	18.2	17.8
Return on Net Plant	4.3	4.1	4.2	4.4	10.1	15.6[R]	14.8
Pretax Coverage of:							
Total Interest Expense	4.7	3.9	3.8	2.9	4.0	4.6	4.4
Long-Term Debt Interest Expense	5.0	4.3	4.1	3.3	4.5	5.9	5.9
Allowance for Funds Used During Construction of % of Net Income	4.0	3.5	4.8	4.3	3.0	3.6	5.1
Expenses							
Operating Expenses as % of Operating Revenue	82.8	84.6	86.5	85.8	88.8	93.7	95.0
Maintenance Expenses as % of Total Plant	0.8	0.7	0.7	0.7	0.9	1.2	1.3
Depreciation Expenses as % of Total Plant	3.1	3.2	3.1	3.1	4.4	4.3	4.1
Depreciation Expenses as % of Depreciable Plant	c	c	c	c	4.4	5.2	4.9
Total Taxes as % of Total Plant	3.7	3.6	3.1	2.3	5.0	5.8	6.0
Total Taxes as % of Net Plant	4.6	4.6	4.4	3.4	8.6	11.1	11.4
Total Taxes as % of Net Income plus Total Taxes	49.0	50.2	48.4	40.0	44.6[b]	40.4[b]	42.0[b]
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[d]	41.2	34.0	35.9	26.2	35.6[b]	21.9[b]	26.9[b]
Plant							
Total Plant per $ of Total Operating Revenue	3.1	2.8	2.8	2.8	1.7	0.9	0.7
Net Plant per $ of Total Operating Revenue	2.5	2.2	2.0	1.9	1.0	0.5	0.4
Depreciation Reserve as % of Total Plant	19.0	22.8	29.3	32.5	42.4	48.2	47.3
Depreciation Reserve as % of Depreciable Plant	c	c	c	c	43.8	58.3	57.5
Total Plant per Employee ($000)	c	285.4	388.7	505.0	547.1	652.2	673.3
Capitalization							
Long-term Debt as % of Net Plant	65.2	63.4	61.8	62.1	71.8	67.0	64.1
% Total Capitalization Represented by:							
a. Long-term Debt	62.1	59.6	58.8	57.1	48.6	40.5	39.4
b. Preferred Stock	8.3	8.7	8.4	8.5	5.8	6.4	6.7
c. Common Equity	29.7	31.8	32.9	34.4	45.5	53.1	53.9
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	c	c	c	c	55.4	66.1	65.1
b. Equity Issues	c	c	c	c	3.7	10.6	6.0
c. Debt Issues	c	c	c	c	40.9	23.3	28.9

a. Data for 1970 and prior years not directly comparable to subsequent years due to reclassification of several companies from Integrated to Transmission. For definitions to companies, refer to Glossary.

b. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.

c. Not available.

d. Includes "Investment Tax Credit Adjustment." Prior to 1966, also includes "Provision for Deferred Federal Income Taxes" and "Portion of Current Federal Income Taxes Provided For in Prior Years."

R – Revised

TABLE 147
SELECTED COMPOSITE ANALYTICAL RATIOS INVESTOR-OWNED GAS UTILITY INDUSTRY INTEGRATED COMPANIES, 1974–1980

	1974	1975	1976[a]	1977	1978	1979	1980
Earnings							
Utility Operating Income as % of Total Plant	6.2	6.4	5.6	6.3	5.9	5.6	5.8
Utility Operating Income as % of Net Plant	9.1	9.6	8.5	9.6	9.1	8.6	9.1
Operating Revenue as % of Total Plant	51.7	63.5	71.2	82.5	89.0	106.5	129.0
Common Dividend Payout Ratio	54.3	60.6	74.4	57.2	64.7	50.8	52.3
Return on Common Equity	13.7	13.9	12.9	13.8	12.0	15.2	15.6
Return on Average Common Equity	13.8	14.3	13.2	14.2	12.3	15.8	15.7
Return on Net Plant	6.9	7.6	7.2	7.9	6.9	8.7	9.4
Pretax Coverage of:							
Total Interest Expense	3.8	4.2	4.3	4.7	4.4	4.6	4.2
Long-Term Debt Interest Expense	4.3	4.6	4.6	5.1	5.2	5.8	6.1
Allowance for Funds Used During Construction as % of Net Income	1.5	1.7	1.6	1.2	1.7	1.5	2.0
Expenses							
Operating Expenses as % of Operating Revenue	88.4	90.2	92.2	92.6	93.6	94.9	95.7
Maintenance Expenses as % of Total Plant	1.3	1.4	1.6	1.8	1.8	2.0	2.0
Depreciation Expenses as % of Total Plant	3.0	3.1	3.1	3.1	3.2	3.4	3.6
Depreciation Expenses as % of Depreciable Plant	3.1	3.2	3.3	3.2	3.5	3.7	4.5
Total Taxes as % of Total Plant	4.5	5.3	5.8	6.1	5.9	6.3	6.5
Total Taxes as % of Net Plant	6.6	7.9	8.9	9.3	9.2	9.7	10.1
Total Taxes as % of Net Income plus Total Taxes	47.9	50.2	54.1	52.6	55.6	51.5	50.8
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	22.1	27.3	31.2	29.6	27.6	7.0	27.0
Plant							
Total Plant per $ of Total Operating Revenue	1.9	1.6	1.5	1.2	1.1	0.9	0.8
Net Plant per $ of Total Operating Revenue	1.3	1.1	1.0	0.8	0.7	0.6	0.5
Depreciation Reserve as % of Total Plant	32.0	33.2	34.2	34.4	35.3	34.9	35.7
Depreciation Reserve as % of Depreciable Plant	34.6	35.9	36.5	35.0	38.2	38.1	44.1
Total Plant per Employee ($000)	189.3	197.8	209.5	211.4	223.7	239.4	250.9
Capitalization							
Long-term Debt as % of Net Plant	58.8	60.5	59.8	56.4	52.2	52.0	55.5
% Total Capitalization Represented by:							
a. Long-term Debt	52.3	51.1	50.2	47.9	45.4	45.4	46.2
b. Preferred Stock	2.6	2.9	2.6	3.6	4.4	4.4	3.9
c. Common Equity	45.2	46.0	47.2	48.5	50.2	50.1	49.9
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	c	59.7	45.9	66.3	63.4	74.9	62.0
b. Equity Issues	c	8.7	28.0	7.2	2.9	1.3	2.6
c. Debt Issues	c	31.6	26.1	26.5	33.7	23.8	35.4

a. Data not directly comparable to previous years due to company reclassification.
b. Includes "Investment Tax Credit Adjustment."
c. Not available.

ANALYTICAL RATIOS

TABLE 148
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
COMBINATION COMPANIES, 1974-1980.

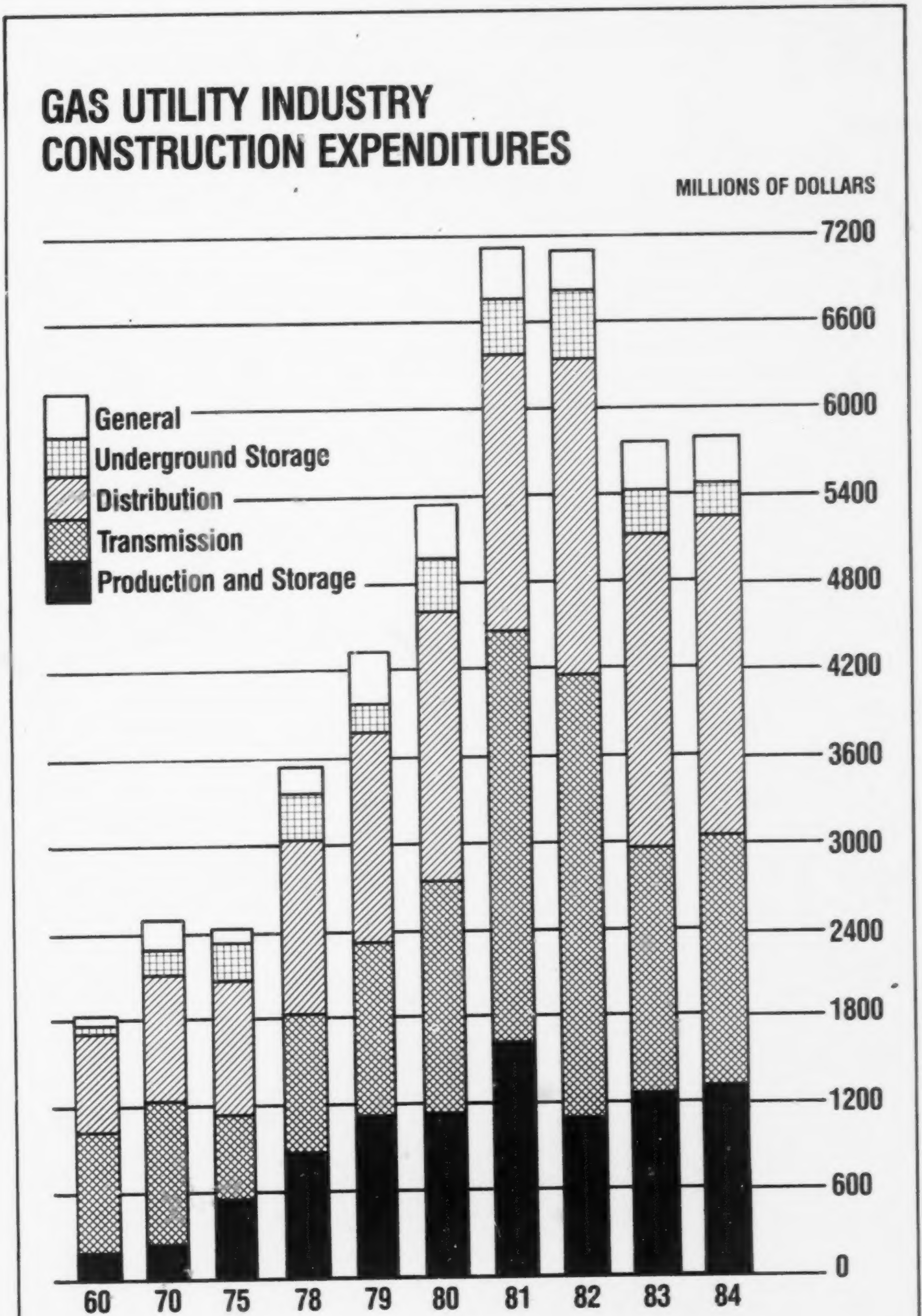
	1974	1975	1976	1977	1978	1979	1980
Gas Operations							
Earnings							
Utility Operating Income as % of Total Plant	6.3	6.3	6.5	5.7	6.2	6.0	7.4
Utility Operating Income as % of Net Plant	8.3	8.4	8.8	8.0	8.7	8.5	10.7
Operating Revenue as % of Total Plant	50.3	60.4	71.8	78.2	84.6	95.3	108.4
Common Dividend Payout Ratio	54.1	61.0	47.5	64.5	52.5	52.4	59.0
Return on Common Equity	12.6	11.3	15.6	11.8	11.6	14.4	15.5
Return on Average Common Equity	a	12.1	15.9	12.1	13.2	15.2	16.0
Return on Net Plant	4.4	4.1	5.6	4.4	4.1	5.4	5.8
Pretax Interest Coverage:							
Total Interest Expense	4.2	4.2	5.3	4.8	5.0	5.5	4.6
Long-Term Debt Interest Expense	4.7	4.5	5.5	5.0	5.3	5.9	5.4
Allowance for Funds Used During Construction as % of Net Income	20.6	21.1	16.6	14.6	20.1	20.7	29.3
Expenses							
Operating Expenses as % of Operating Revenue	89.0	90.9	91.0	92.7	92.7	93.8	94.5
Maintenance Expenses as % of Total Plant	2.0	2.0	2.1	2.3	2.2	2.3	2.3
Depreciation Expenses as % of Total Plant	2.7	2.9	3.0	3.1	3.1	3.1	3.1
Depreciation Expenses as % of Depreciable Plant	2.9	3.0	3.1	3.1	3.1	3.1	3.6
Total Taxes as % of Total Plant	4.7	5.3	6.8	6.5	7.1	7.0	6.9
Total Taxes as % of Net Plant	6.3	7.1	9.4	9.0	10.9	10.0	10.1
Total Taxes as % of Net Income plus Total Taxes	54.7	58.8	58.8	62.8	59.7	61.2	59.3
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	24.1	10.8	27.5	17.8	27.7	26.9	15.5
Plant							
Total Plant per $ of Total Operating Revenue	2.0	1.7	1.4	1.3	1.2	1.0	0.9
Net Plant per $ of Total Operating Revenue	1.5	1.2	1.0	0.9	0.8	0.7	0.6
Depreciation Reserve as % of Total Plant	24.4	25.5	26.9	28.6	29.4	30.4	30.9
Depreciation Reserve as % of Depreciable Plant	26.3	27.3	27.9	28.9	29.9	31.0	36.4
Total Plant per Employee ($000)	166.6	181.8	193.3	200.5	212.0	215.6	230.5
All Operations							
Earnings							
Utility Operating Income as % of Total Plant	5.7	6.1	6.3	6.3	6.3	6.3	6.5
Utility Operating Income as % of Net Plant	7.2	7.3	8.0	8.0	8.1	8.1	8.4
Operating Revenue as % of Total Plant	28.5	31.6	33.3	35.5	35.5	36.7	39.9
Common Dividend Payout Ratio	67.5	66.9	64.7	66.1	68.6	72.6	75.9
Return on Common Equity	9.8	10.2	10.8	10.7	10.7	10.7	10.8
Return on Average Common Equity	10.2	10.0	10.5	11.1	11.1	11.4	11.2
Return on Net Plant	3.3	3.5	3.8	3.9	4.0	4.0	4.0
Pretax Interest Coverage of:							
Total Interest Expense	3.5	3.7	4.0	4.1	4.1	3.8	3.5
Long-Term Debt Interest Expense	3.9	3.9	4.2	4.3	4.3	4.1	4.1
Allowance for Funds Used During Construction as % of Net Income	28.5	25.0	23.2	25.4	26.9	33.1	37.6
Expenses							
Operating Expenses as % of Operating Revenue	83.2	83.3	83.9	85.0	85.2	86.3	87.2
Maintenance Expenses as % of Total Plant	1.6	1.7	1.7	1.9	1.9	2.1	2.1
Depreciation Expenses as % of Total Plant	2.3	2.4	2.4	2.4	2.3	2.4	2.4
Depreciation Expenses as % of Depreciable Plant	2.5	2.6	3.0	3.0	3.2	3.3	3.2
Total Taxes as % of Total Plant	3.6	4.2	4.6	4.7	4.7	4.3	4.3
Total Taxes as % of Net Plant	4.5	5.3	5.9	6.0	6.0	5.6	5.6
Total Taxes as % of Net Income plus Total Taxes	52.7	54.7	55.2	55.4	55.2	53.4	53.3
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	8.1	15.6	20.4	21.4	21.4	15.6	16.8
Plant							
Total Plant per $ of Total Operating Revenue	3.5	3.2	3.0	2.8	2.8	2.7	2.5
Net Plant per $ of Total Operating Revenue	2.8	2.5	2.4	2.2	2.2	2.1	1.9
Depreciation Reserve as % of Total Plant	20.6	21.0	21.5	21.9	22.3	22.4	22.6
Depreciation Reserve as % of Depreciable Plant	22.4	23.0	26.5	26.8	26.6	26.8	30.3
Capitalization							
Long-term Debt as % of Net Plant	49.7	50.6	49.2	48.2	47.2	46.3	45.7
% Total Capitalization represented by:							
a. Long-term Debt	51.8	51.4	50.1	49.3	48.6	48.4	48.0
b. Preferred Stock	13.4	13.4	13.6	13.6	13.4	13.3	13.3
c. Common Equity	34.8	35.2	36.3	37.2	38.0	38.3	38.7
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	a	45.9	48.4	57.3	50.0	24.7	32.5
b. Equity Issues	a	28.0	26.8	31.5	23.9	3.0	35.9
c. Debt Issues	a	26.1	24.8	11.2	26.1	72.3	31.6

a. Not available.
b. Includes "Investment Tax Credit Adjustment."

SECTION XII
FINANCE
PART 5. CONSTRUCTION EXPENDITURES

	1980	% Change 80/79
Construction Expenditures		
Total	5,350	+22.5
Production & Storage	1,150	+ 2.2
Transmission	1,583	+29.1
Underground Storage	396	+40.9
Distribution	1,869	+29.1
General	352	+23.1

CHART 23



REFERENCE: TABLE 150

CONSTRUCTION EXPENDITURES

TABLE 150
GAS UTILITY INDUSTRY CONSTRUCTION EXPENDITURES, BY TYPE OF FACILITY, 1955-1984*

(Millions)

Year	Total	Production and Storage	Transmission	Underground Storage	Distribution	General
1955	$1,345	$ 138	$ 593	$ 60	$ 500	$ 54
1956	1,552	188	704	50	534	76
1957	1,772	281	753	68	593	77
1958	1,618	218	715	73	541	71
1959	1,728	227	694	79	643	85
1960	1,845	157	848	59	696	85
1961	1,662	172	654	55	687	94
1962	1,673	177	613	53	708	122
1963	1,558	138	461	106	752	101
1964	1,701	120	616	84	784	97
1965	1,935	156	770	69	824	116
1966	2,374	182	1,038	151	869	134
1967	2,252	186	1,006	91	848	121
1968	2,972	259	1,577	88	913	135
1969	2,686	83	1,511	128	863	101
1970	2,507	203	1,019	167	913	205
1971	2,419	340	842	171	888	178
1972	2,822	717	678	177	1,081	169
1973	2,966	771	746	201	1,094	155
1974	2,965	830	632	230	1,097	176
1975	2,466	555	590	276	910	136
1976	2,425	466	531	362	926	140
1977	2,833	620	670	323	1,048	172
1978	3,581	881	935	321	1,228	215
1979	4,366	1,125	1,226	281	1,448	286
1980	5,350	1,150	1,583	396	1,869	352
1981 (forecast)	7,112	1,614	2,862	337	1,921	378
1982 (forecast)	7,096	1,073	3,095	478	2,154	296
1983 (forecast)	5,773	1,243	1,743	350	2,119	318
1984 (forecast)	5,803	1,301	1,711	210	2,243	338

*For companies not reporting 1984 forecast, data extrapolated from earlier years.

TABLE 151
GAS UTILITY INDUSTRY CONSTRUCTION EXPENDITURES, BY TYPE OF FACILITY, 1976-1980

	1976	1977	1978	1979	1980
Production and Storage	100.0%	100.0%	100.0%	100.0%	100%
SNG Plant	8.1	2.1	8.6	0.6	3.1
LNG Plant	0.2	a	a	a	0.1
Propane Plant	0.2	1.5	0.8	2.2	2.3
Exploration and Drilling	28.6	28.2	21.8	29.1	18.2
Other[b]	48.5	55.7	62.1	64.1	72.3
LNG Storage	13.6	11.9	4.1	2.6	1.3
Other Storage	0.6	0.6	2.6	1.4	2.6
LNG Ships	c	a	a	0.0	0.0
Transmission	100.0%	100.0%	100.0%	100.0%	100.0%
New and Replacement	71.2	74.2	77.6	68.7	70.4
Compressor Stations	18.6	21.6	16.4	26.0	20.1
Other	10.2	4.2	6.0	5.2	9.6
Distribution	100.0%	100.0%	100.0%	100.0%	100.0%
New and Replacement	86.2	80.3	88.1	88.7	86.2
Compressor Stations	0.1	5.2	a	1.4	4.1
Other	13.7	14.5	11.9	9.9	9.7

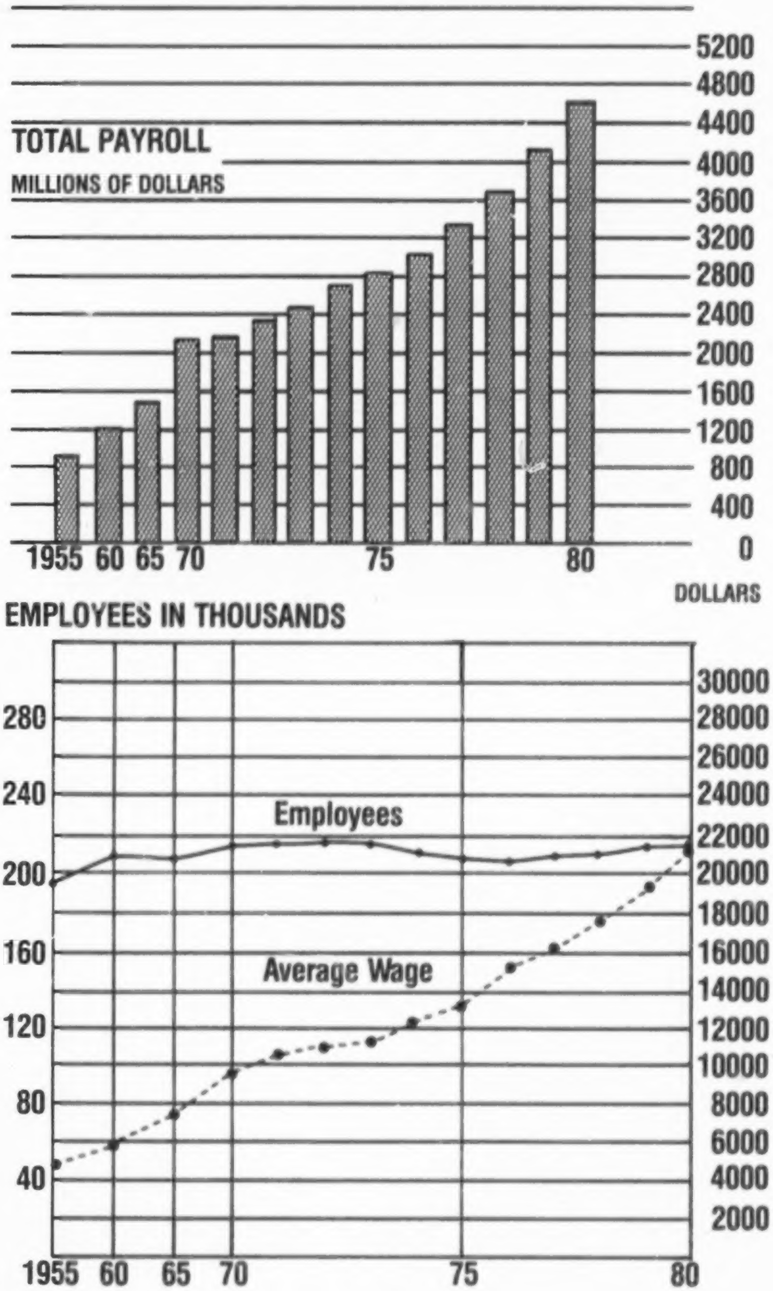
a. Less than 0.1 percent.
b. Includes gathering.
c. Data not available prior to 1977.

SECTION XIII
PERSONNEL DATA

	1980	% Change 80/79
Gas Utility Employees (Thousands)		
Total	215.4	+0.4
Distribution	52.1	+2.6
Transmission	45.2	+6.6
Integrated	53.2	−6.0
Combination	52.2	−0.8
Municipals	12.7	+4.1

CHART 24

GAS UTILITY INDUSTRY PAYROLL, EMPLOYEES AND AVERAGE WAGE



REFERENCE: TABLE 152

PERSONNEL DATA

TABLE 152
GAS UTILITY INDUSTRY EMPLOYEES AND PAYROLL, 1955-1980

Year	Average Number of Employees (Thousands)	Total Payroll (Thousands)	Average Wage per Employee
1955	193.5	$ 904,103	$ 4,670
1956	201.0	984,472	4,900
1957	201.6	1,034,003	5,130
1958	202.5	1,096,553	5,420
1959	204.9	1,166,156	5,690
1960	206.4	1,214,565	5,880
1961	206.1	1,268,437	6,150
1962	204.4	1,316,057	6,440
1963	204.5	1,377,729	6,740
1964	204.8	1,420,754	6,940
1965	205.7	1,480,397	7,200
1966	207.4	1,556,577	7,500
1967	207.2	1,640,397	7,920
1968	208.6	1,759,784	8,440
1969	210.2	1,890,490	8,990
1970	211.7	2,021,197	9,550
1971	213.7	2,142,892	10,028
1972	215.4	2,321,932	10,780
1973	215.2	2,449,075	11,381
1974	213.4	2,606,903	12,216
1975	207.6	2,817,150	13,570
1976	205.1	3,044,605	14,844
1977	208.8	3,371,856	16,149
1978	209.8	3,647,057	17,383
1979	214.6	4,134,270	19,265
1980	215.4	4,612,791	21,415

TABLE 153

GAS UTILITY INDUSTRY EMPLOYEES AND PAYROLL BY TYPE OF PAYROLL AND TYPE OF COMPANY, 1955-1980

(Thousands)

	1955	1960	1965	1970	1975	1979	1980
Total							
Employees	193.5	206.4	205.7	211.7	207.6	214.6	215.4
Payroll -- Total	$904,103	$1,214,565	$1,480,397	$2,021,197	$2,817,150	$4,134,270	$4,612,791
Operating	683,767	914,438	1,146,226	1,606,321	2,292,448	3,335,477	3,652,941
Construction	160,180	209,082	262,792	325,546	380,835	556,064	627,706
Miscellaneous	60,156	62,045	71,379	89,330	143,867	242,728	332,144
Investor Owned – Total							
Employees	*	*	*	*	196.3	202.4	202.7
Payroll – Total	*	*	*	*	$2,675,092	$3,929,210	$4,379,653
Operating	*	*	*	*	2,184,446	3,168,049	3,463,437
Construction	*	*	*	*	357,221	525,934	594,326
Miscellaneous	*	*	*	*	133,425	235,226	321,890
Distribution							
Employees	*	*	*	*	51.3	50.8	52.1
Payroll – Total	*	*	*	*	$697,552	$938,491	$1,040,436
Operating	*	*	*	*	567,947	753,893	831,076
Construction	*	*	*	*	98,257	135,581	152,964
Miscellaneous	*	*	*	*	31,348	49,017	56,396
Transmission							
Employees	*	31.4	29.6	32.4	37.2	42.4	45.2
Payroll – Total	*	$199,701	$228,493	$331,955	$574,275	$947,175	$1,178,706
Operating	*	166,064	187,521	266,685	470,418	751,176	873,199
Construction	*	21,955	30,650	44,869	53,832	89,903	108,974
Miscellaneous	*	11,682	10,322	20,401	50,025	106,096	196,533
Integrated							
Employees	*	*	*	*	55.4	56.6	53.2
Payroll – Total	*	*	*	*	$676,967	$1,035,855	$1,061,520
Operating	*	*	*	*	548,291	843,190	873,837
Construction	*	*	*	*	91,439	127,938	138,062
Miscellaneous	*	*	*	*	37,237	64,726	49,621
Combination							
Employees	*	*	*	*	52.4	52.6	52.2
Payroll – Total	*	*	*	*	$726,298	$1,007,689	$1,098,991
Operating	*	*	*	*	597,790	819,790	885,325
Construction	*	*	*	*	113,693	172,512	194,326
Miscellaneous	*	*	*	*	14,815	15,387	19,340

*Not available.

TABLE 154
EMPLOYEE ACCIDENT INCIDENT AND SEVERITY RATES OF SELECTED INDUSTRIES, 1979[a]

	Rate	
	Incident	Severity
Gas Utilities[b]	**2.81**	**16.37**
All Industries	**2.67**	**18.73**
Agricultural Chemicals	1.51	12.58
Aircraft	0.80	13.75
Air Transportation	4.92	9.15
Bituminous Coal	3.55	11.83
Cement	2.96	20.95
Chemical	0.88	19.32
Communications	1.53	12.42
Construction	3.89	25.19
Electric, Electronic Equipment	1.26	18.25
Electric Service	1.23	21.14
Fabricated Metal Products	2.73	18.31
Food	4.71	18.47
Furniture and Fixtures	2.99	15.05
General Government	8.79	12.40
Iron and Steel Foundries	3.43	24.20
Leather	3.30	16.36
Lumber and Wood Products	5.71	21.72
Machinery, Exc. Electrical	2.71	15.87
Meat Products	8.46	15.96
Metal Mining	2.63	42.97
Motor Vehicles	1.53	17.65
Nonferrous Rolling, Drawing	2.75	24.00
Nonmetallic Minerals	4.66	34.12
Oil and Gas Extraction	1.71	27.49
Paper	3.14	25.48
Petroleum and Coal Products	1.58	24.05
Pipeline Transportation	1.03	15.53
Primary Nonferrous Metals	3.18	26.73
Printing and Publishing	3.92	19.13
Railroad Equipment	12.14	18.45
Railroad Transportation	7.95	17.61
Rubber and Plastics	2.20	21.81
Services	1.39	12.95
Ship and Boat Building	8.52	25.00
Steel	1.86	28.49
Stone, Clay and Glass	5.17	19.15
Textile	1.02	27.45
Transit	18.29	17.60
Trucking	6.56	14.18
Water Transportation	2.50	29.60
Wholesale and Retail Trade	3.22	15.84

a. Incident rate is the number of disabling injuries per 100 full-time employees. Severity rate is average lost workdays per injury.
b. Gas figures derived from National Safety Council data.
Source: National Safety Council

TABLE 155
DEATH RATES OF WORKERS, BY MAJOR INDUSTRIES, 1979

	Deaths	
	Total	Per 100,000 Workers
All Industries	**13,200**	**14**
Agriculture	1,900	58
Construction	2,600	45
Government	1,700	11
Manufacturing	1,800	9
Mining, Quarrying, Oil and Gas Wells	500	56
Service	1,800	8
Trade	1,300	6
Transportation and Public Utilities	1,600	30
Gas*	10	7

*Included in Transportation and Public Utilities. Data derived from A.G.A. "Report of Occupational Injuries and Illnesses in the Gas Utility and Transmission Industry in the United States," and does not represent total industry.
Source: National Safety Council; gas figures derived from A.G.A. data.

TABLE 149

SELECTED ANALYTICAL RATIOS RELATING TO INVESTOR-OWNED GAS UTILITY INDUSTRY OPERATING AND MAINTENANCE EXPENSES, 1970-1980[a]

	Total Operating and Maintenance Expense per Therm of Sales (cents)					Total Operating Revenue per Therm of Sales (cents)				
Type of Activity	1970	1975	1978	1979	1980	1970	1975	1978	1979	1980
Natural Gas Distribution[b]	5.85	11.53	19.45	23.10	29.44	8.46	15.12	24.17	27.97	34.70
Natural Gas Transmission	2.44	6.07	12.96	16.03	22.09	3.45	8.35	15.98	18.99	24.43

	Transmission and Distribution Expense per Mile of Pipe (dollars)					Total Cost of Purchases as Percent of Total Operating and Maintenance Expense				
Type of Activity	1970	1975	1978	1979	1980	1970	1975	1978	1979	1980
Natural Gas Distribution[b]	1,423.97	1,904.73	2,249.76	2,703.18	3,604.37	69.30	77.74	83.54	84.19	84.43
Natural Gas Transmission	2,398.21	2,398.21	6,773.58	9,396.77	12,782.10	89.00	86.09	88.92	88.35	89.89

	Customer Accounts Expense Per Customer (dollars)					Total Payroll as Percent of Total Operating and Maintenance Expense				
Type of Activity	1970	1975	1978	1979	1980	1970	1975	1978	1979	1980
Natural Gas Distribution[b]	8.06	13.90	18.39	18.26	21.24	19.18	14.97	11.41	10.44	9.35
Natural Gas Transmission						7.41	5.99	4.58	3.75	3.24

	Gross Sales Expense per Customer (dollars)				
Type of Activity	1970	1975	1978	1979	1980
Straight Natural Gas Distribution	6.56	2.90	2.98	2.80	2.88
Combination Natural Gas Distribution	4.01	1.16	1.40	0.53	0.53

a. Integrated companies excluded.
b. Includes both straight gas and combination companies.

APPENDIX A
GLOSSARY

(This is an abbreviated list of gas utilty industry definitions. A complete list is contained in the Glossary for the Gas Industry).

Accident Frequency Rate: See Injury Frequency Rate, Disabling.

Accident Incident Rate: See Injury Incident Rate.

Accident Severity Rate: See Injury Severity Rate, Disabling.

Additions (To Utility Plant):

Gross Additions: Cost of construction, generally including overhead and allowance for funds used during construction (interest during construction), cost of land, land rights, and mineral interests, gas capitalized in underground storage, used facilities acquired, and the purchase cost of an acquired operating unit or system of utility plant. See Construction Expenditures.

Net Additions: Gross additions less retirements and adjustments of utility plant. It is the net change in utility plant between two dates.

Anthracite: A hard coal containing little volatile matter, low ash and generally having a heating value of 11,000-15,000 Btu/lb.

Associated Natural Gas: See Gas, Natural.

Associated Number of Customers: See Customers, Average Number of.

Average Revenue per Unit of Gas Sales (By Class of Service): See Revenue, Average per Unit of Gas Sales.

Barrel (Oil): A volumetric unit of measurement equivalent to 42 U.S. Standard gallons.

Bituminous Coal: Ranking of soft coal generally having a heating value of 11,000-14,000 Btu/lb., high in volatile matter and ash.

Blue Gas: See Water Gas.

Boiler Fuel Gas: Natural gas used as a fuel for the generation of steam (or hot water).

Bottled Gas: In the industry, liquefied petroleum gas contained under moderate pressure in cylinders, sometimes referred to as bottles. Usually propane and/or butane.

British Thermal Unit (Btu): The quantity of heat that must be added to one pound of water to raise its temperature one degree Farenheit from 58.5 to 59.5 degrees Fahrenheit under standar pressure of 30 inches of mercury.

By-Products (Residuals): Secondary products which are obtained from the processing of a raw material and have commercial value. They may be the residues of the gas production process, such as coke, tar, and ammonia, or they may be the result of further processing of such residues, such as ammonium sulphate.

Capacity, Effective: The maximum load which a machine, apparatus, device, plant or system is capable of carrying under existing service conditions.

Carbon Black: Almost pure amorphous carbon consisting of extremely fine particles, usually produced from gaseous or liquid hydrocarbons by controlled combustion with a restricted air supply or by thermal decomposition.

Casinghead Gas: Unprocessed natural gas containing gasoline vapors produced from a reservoir containing oil.

City Gate (Town Border Station): See Gate Station.

Class of Service: Defines the type of customer. The common classes of service applied to ultimate consumers, and considerably more completely described in the A.G.A. publication "Definitions of a Gas Customer and Classes of Service for Industry Reporting Purposes" are:

1. **Residential Service**
   Covers service to customers for domestic purposes (single, multifamily or mobile homes, etc.). In residential service, the number of housing units within a structure determines the customer classification.
2. **Commercial Service**
   Covers service to customers engaged in wholesale or retail trade, agriculture, communications, finance, fisheries, forestry, government insurance, real estate, transportation, etc., and to customers not directly involved in other classes of service.
3. **Industrial Service**
   Covers service to customers engaged primarily in a process which either involves the extraction of raw materials from the earth, or a change of raw or unfinished materials into another form or product.
4. **Other Services**
   Service to municipalities or divisions (agencies) of State or Federal Governments under special contracts or agreements or service classifications, which are applicable only to public authorities using gas for general or institutional purposes. (Exclude sales properly included under items 2 or 3 above, such as manufacturing arsenals or publicly-owned power systems).
5. **Sales for Resale** (Uniform System of Accounts, 483)
   Service to other utility companies, governmental agencies (municipal, county, state or federal), rural cooperatives, etc., for distribution and resale to ultimate customers. Service to other utilities for use by them and not for distribution and resale, is to be classified as residential, commercial, or industrial, depending upon the primary business or economic activity.

Coal Gas: Manufactured gas made by distillation or carbonization of coal in a closed coal gas retort, coke oven, or other vessel.

Combination Utility: Utility which supplies both gas and some other utility service (electricity, water, etc.). For purposes of A.G.A. statistics, a combination utility derives at least 5 percent but less than 95 percent of its total operating revenues from gas operations. See Appendix C for a list of combination companies.

Commercial Service: See Class of Service.

APPENDIX A

Communities (Served): A community is a contiguous built-up area, incorporated or unincorporated, commonly recognized as a separate entity. Any incorporated area and its adjacent built-up unincorporated area may be counted as only one community.

Compressor Horsepower: See Horsepower, Compressor.

Compressor Station: Any permanent combination of facilities which supplies the energy to move gas at increased pressure from fields, in transmission lines or into storage. For reporting to A.G.A. include field (other than temporary) line, and storage compressor stations of producing and transmission companies; distribution companies should include underground storage compressor stations and stations used for transporting gas between local distribution systems but not booster or pumping stations used within a local distribution system.

Condensate: The liquid resulting when a vapor is subjected to cooling and/or pressure reduction. Also, liquid hydrocarbons condensed from gas and oil wells. Compare Liquids, under Gas, Natural.

Construction Expenditures: Cost of construction, including overheads and allowance for funds used during construction, for additions to, renewals, and replacements of plant facilities, but excluding the purchase cost of an acquired operating unit or system of utility plant, accounting transfers and adjustments to utility plant, and cost to remove plant facilities from service.

Conversion to Natural Gas: Changing the gas service to ultimate customers from a fuel other than natural gas to natural gas, including adjustment of consumers' appliances to perform satisfactorily with natural gas. Natural gas does not necessarily mean straight natural gas; stabilizing the heat content of the sendout gas by diluent gases or enriching gases is not considered to change the basic character of natural gas. For the purpose of uniform reporting a company should be considered a natural gas company when 95 percent of the system has been converted.

Cubic Foot: The most common unit of measurement of gas volume. It is the amount of gas required to fill a volume of one cubic foot under stated conditions of temperature, pressure, and water vapor.

Current Gas: See Storage, Underground.

Cushion Gas: See Base Gas under Storage, Underground.

Customer: An individual, firm or organization which purchases service at one location under one rate classification, contract, or rate schedule. If service is supplied at more than one location or under more than one rate schedule, each location and rate schedule shall be counted as a separate customer unless the consumption at the several locations is combined before billing and billed on one rate schedule.

Customers, Average Number of: The average number of customers is determined by summing the customers for each of the periods involved and dividing by the number of periods. See Customer.

Customers, End of Year: The number of customers at December (or the last month of a fiscal year) including all billing cycles. See Customers, Average Number of.

Degree Day, Heating: A measure of the coldness of the weather experienced, based on the extent to which the daily mean temperature falls below a reference temperature, usually 65°F. For example, on a day when the mean outdoor dry-bulb temperature is 35°F., there would be 30 degree days experienced. A daily mean temperature usually represents the sum of the high and low readings divided by two.

Demand: The rate at which gas is delivered to or by a system, part of a system, or a piece of equipment, expressed in cubic feet or therms or multiples thereof, for a designated period of time called the demand interval. Compare Load.

Design Day: A 24-hour period of demand which is used as a basis for planning gas capacity requirements.

Design Day Availability: The amount of each type of gas arranged to be available on the design day and the maximum combination of such supplies. (In the case of purchased natural gas, the maximum day allocation, maximum day contract quantity, or FERC authorization).

Design Day Temperature: The mean temperature assumed for the Design Day.

Dissolved Natural Gas: See Gas, Natural.

Distribution Company, Gas: Company which obtains the major portion of its gas operating revenues from the operation of a retail gas distribution system, and which operates no transmission system other than incidental connections within its own system or to the system of another company. For purposes of A.G.A. statistics, a distribution company obtains at least 95 percent of its gas operating revenues from sales to ultimate customers *and* classifies at least 95 percent of mains (other than service pipe) as distribution. Compare Integrated Company, Gas; Transmission Company, Gas. See Appendix C for a list of Distribution Companies.

Distribution Mains: See System Type.

Distribution System, Gas: See System Type.

Dry Natural Gas: See Gas, Natural.

Enriching: Increasing the heat content of a gas by mixing with it a gas of higher Btu content.

Exchange Gas: Gas that is received from (or delivered to) another party in exchange for gas delivered to (or received from) such other party.

Extraneous Gas: See Storage, Underground.

Field Pipeline: See System Type.

APPENDIX A

Firm Service: Service offered to customers (regardless of Class of Services) under schedules or contracts which anticipate no interruptions. The period of service may be for only a specified part of the year as in Off-Peak Service. Certain firm service contracts may contain clauses which permit unexpected interruption in case the supply to residential customers is threatened during an emergency. Compare Interruptible Service; and Off-Peak Service.

Foreign Gas: See Storage, Underground.

Gallon: A unit of liquid measure. The U.S. gallon contains 231 cubic inches or 8.3359 pounds avoirdupois of distilled water at its maximum density and with the barometer at 30 inches.

Gas, Dry: See Gas, Natural.

Gas, Liquefied Petroleum (LPG): A gas containing certain specific hydrocarbons which are gaseous under normal atmospheric conditions, but can be liquefied under moderate pressure at normal temperatures. Propane and butane are the principal examples.

Gas, Manufactured: A gas obtained by destructive distillation of coal, or by the thermal decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke or catalyst beds. Examples are coal gases, coke oven gases,producer gas, blast furnace gas, blue (water) gas, carbureted water gas. Btu content varies widely.

Gas, Natural: A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in porous geologic formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane.

Associated: Free natural gas in immediate contact, but not in solution with crude oil in the reservoir.

Dissolved: Natural gas in solution in crude oil in the reservoir.

Dry: Gas whose water content has been reduced by a dehydration process. Gas containing little or no hydrocarbons commercially recoverable as liquid product. Specified small quantities of liquids are permitted by varying statutory definition in certain states.

Liquefied (LNG): Natural gas which has been liquefied by reducing its temperature to minus 260°F at atmospheric pressure. It remains a liquid at −116°F and 673 PSIG. In volume it occupies 1/600 of that of the vapor.

Liquids: Those liquid hydrocarbon mixtures which are gaseous at reservoir temperatures and pressures, but are recoverable by condensation or absorption. Natural gasoline and liquefied petroleum gases fall in this category.

Non-Associated: Free natural gas not in contact with, nor dissolved in, crude oil in the reservoir.

Sour: Gas found in its natural state, containing such amount of compounds of sulphur as to make it impractical to use, without purifying, because of its corrosive effect on piping and equipment.

Substitute: A gas manufactured from carbonaceous material whose characteristics are substantially interchangeable with natural gas. The resultant gas is composed primarily of methane. At this writing, SNG feedstocks are the light hydrocarbons, propane, butane and the naphthas. Development is underway of processes for production from heavier feedstocks, coal, peat and solid wastes.

Sweet: Gas found in its natural state, containing such small amount of compounds of sulphur that it can be used without purifying, with no deleterious effect on piping and equipment.

Wet: Wet natural gas is unprocessed natural gas or partially processed natural gas, produced from strata containing condensable hydrocarbons. The term is subject to varying legal definitions as specified by certain state statutes.

Gas, Oil: A gas resulting from the thermal decomposition of petroleum oils, composed mainly of volatile hydrocarbons and hydrogen. The true heating value of oil gas may vary between 800 and 1600 Btu per cubic foot depending on the operating conditions and feedstock properties.

Gas, Substitute Natural (SNG): See Gas, Natural.

Gas Transported for Others: That volume of gas owned by another company received into and transported through any part of the transmission system under a transportation tariff.

Gate Station: Generally, a location at which gas changes ownership, from one party to another, neither of which is the ultimate consumer. It should be noted, however, that the gas may change from one system to another at this point without changing ownership. Also referred to as city gate station, town border station or delivery point.

Gathering Pipeline: See System Type.

Heating Value: The amount of heat produced by the complete combustion of a unit quantity of fuel. The gross or higher heating value is that which is obtained when all of the products of combustion are cooled to the temperature existing before combustion, the water vapor formed during combustion is condensed, and all the necessary corrections have been made. The net or lower heating value is obtained by subtracting the latent heat of vaporization of the water vapor formed by the combustion of the hydrogen in the fuel, from the gross or higher heating value.

Holder, Gas: A gas-tight receptacle or container in which gas is stored for future use. (1) at approximately constant pressure (low pressure containers) in which case the volume of the container changes; and (2) in containers of constant volume (usually high pressure containers) in which case the quantity of gas stored varies with the pressure.

Holding Company: A gas holding company is a corporation that is formed for the purpose of owning stock in other gas companies.

Horsepower, Compressor: The horsepower rating on the nameplate.

Horsepower, Mechanical: A unit of power numerically equal to a rate of 33,000 foot-pounds of work per minute or 550 foot-pounds per second.

Hydrocarbon: A chemical compound composed solely of hydrogen and carbon. The compounds having a small number of carbon and hydrogen atoms in their molecule are usually gaseous; those with a larger number of atoms are liquid and the compounds with the largest number of atoms are solid.

Industrial Service: See Class of Service.

APPENDIX A

Injury Frequency Rate, Disabling: Number of disabling injuries per million man-hours worked. Such injuries include disabilities and fatalities arising out of and occurring during the course of employment. A disabling injury is one which renders the employee unable to return to work on one or more days after the injury.

Injury Incident Rate: Number of injuries per 100 full-time employees.

Injury Severity Rate, Disabling: Number of days lost due to disabling per million man-hours worked, including appropriate time charges according to a predetermined schedule for permanent disability cases and/or fatalities. Subsequent to 1976, Severity rate is average lost workdays per injury.

Integrated Company, Gas: A company which obtains a significant portion of its gas operating revenues from the operations of both a retail gas distribution system and gas transmission system. For purposes of A.G.A. statistics, an integrated company obtains less than 95 percent but more than 5 percent of its gas operating revenues from either its retail or transmission operations or does not meet the classification of mains established for distribution or transmission companies. Compare Distribution Company, Gas; Transmission Company, Gas. See Appendix C for a list of Integrated Companies.

Interruptible Service: Low priority service offered to customers under schedules or contracts which anticipate and permit interruption on short notice, generally in peak-load seasons, by reason of the claim of firm service customers and higher priority users. Unlike Off-Peak Service, gas is available at any time of the year if the supply is sufficient.

Liquefied Natural Gas (LNG): See Gas, Natural.

Liquefied Petroleum Gas (LPG): See Gas, Liquefied Petroleum.

Line Pack, Gas Delivered from: That volume of gas delivered to the markets supplied by the net change in pressure in the regular system of mains, transmission and/or distribution. For example, the change in the content of a pipeline brought about by the deviation from steady flow condition.

Load: The amount of gas delivered or required at any specified point or points on a system; load originates primarily at the gas consuming equipment of the customers. Also, to load a pressure regulator is to set the regulator to maintain a given pressure as the rate of gas flow through the regulator varies. Compare Demand.

Local Storage: See Storage, Local.

Mcf: 1000 cubic feet.

MMBtu: 1,000,000 Btu.

MMcf: 1,000,000 cubic feet.

Main, Gas: A distribution line that serves as a common source of supply for one or more than one gas service line.

Distribution Mains: See System Type.

Field and Gathering Pipeline: See System Type.

Transmission Pipeline: See System Type.

Manufactured Gas: See Gas, Manufactured.

Marketable Natural Gas: Raw gas from which certain hydrocarbons and non-hydrocarbon compounds have been removed by processing. Marketable natural gas is often referred to as pipeline gas, residue gas, or sales gas.

Maximum Day:
Allocation: See Design Day Availability.
Sendout: See Sendout, Maximum Day.

Minimum Day: See Sendout, Minimum Day.

Naphtha: Any of various volatile, often flammable liquid hydrocarbon mixtures used chiefly as solvents and diluents and as raw materials for conversion to gasoline and substitute natural gas(SNG).

Native Base Gas: See Storage, Underground.

Natural Gas: See Gas, Natural.

Natural Gas, Associated: See Gas, Natural.

Natural Gas, Dissolved: See Gas, Natural.

Natural Gas, Dry: See Gas, Natural.

Natural Gas, Liquefied: See Gas, Natural.

Natural Gas Liquids: See Gas, Natural.

Natural Gas, Non-Associated: See Gas, Natural.

Natural Gas Reserves: See Reserves.

Natural Gas, Sour: See Gas, Natural.

Natural Gas, Sweet: See Gas, Natural.

Natural Gas, Wet: See Gas, Natural.

APPENDIX A

Natural Gasoline: Liquid removed from natural gas by absorption or refrigeration and containing hydrocarbons heavier than butane.

New Gas: Gas produced from wells drilled on production leases acquired after October 7, 1969.

Off-Peak Service: Service made available on special schedules or contracts but only for a specified part of the year during the off-peak season. Compare Interruptible Service.

Oil Gas: See Gas, Oil.

Oil, Heavy: Heavy, thick and viscous. Usually refinery residuals commonly specified as grades 5 and 6.

Oil, Light: Generally, all oils lighter than residual fuel oils No. 5 and No. 6. Oils that have a low specific gravity, usually products of controlled distillation of crude oil but also including by-product benzol and toluol.

Peak Day: The 24-hour day period of greatest total gas sendout. Compare Design Day.

Peak Shaving: Supplying fuel gas for distribution system from an auxiliary source (of limited supply higher cost) during periods of maximum demand, when the primary source is not adequate.

Pipeline: All parts of those physical facilities through which gas is moved in transportation, including pipe, valves and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders and fabricated assemblies. See System Type.

Pressure, Absolute (psia): Pressure above that of a perfect vacuum. It is the sum of gauge pressure and atmospheric pressure.

Pressure, Gauge (psig): Pounds per square inch above atmospheric pressure.

Producer Gas (Also, Manufactured Gas): A combustible gas made in a furnace or apparatus by circulating air or a mixture of air and steam through a layer of incandescent material; consists chiefly of carbon monoxide, hydrogen and nitrogen.

Propane (C_3H_8): A gaseous member of the paraffin series of hydrocarbons, which when liquefied under pressure is one of the components of liquefied petroleum (LP) gas. Contains approximately 2,500 Btu per cubic foot (at 60°F and 30" mercury, and 91, 740 Btu per gallon).

Recoverable Natural Gas Reserves: See Reserves, Recoverable Natural Gas.

Refinery Gas: See Gas, Oil.

Reforming: A chemical process using heat in presence of a catalyst to break down a substance into desired components, such as in the reforming of natural gas or light oils into lower Btu fuel gas.

Repressuring: Forcing gas, under pressure, into the oil reservoir in an attempt to increase the recovery of crude oil; also done with water.

Resale Service: See Class of Service—Sales for Resale.

Reserves: Refers to the bank of natural resources, such as natural gas, natural gas liquids, petroleum, coal, lignite, and energy available from water power, and solar and geothermal energy.

Estimated Potential Natural Gas Reserves: Refers to an estimate of the ultimate finding of natural gas in a specified area, whether or not presently considered proved or recoverable.

Estimated Proved Recoverable Natural Gas Reserves: An estimated quantity of natural gas which analysis of geologic and engineering data demonstrates with reasonable certainty to be recoverable in the future from known oil and gas reservoirs, under existing economic and operating conditions. Reservoirs that have demonstrated the ability to produce by either actual production of conclusive formation test are considered proved.

Revenue, Average Per Unit of Gas Sales (By Class of Service): Revenue from the sale of gas to a class of service, exclusive of forfeited discounts and penalties, divided by the corresponding number of units sold. Units may be therms, Btu's or cubic feet.

Saturation, Appliance or Customer: The number of specified appliances, or users, divided by the basic units or total potential of the universe involved, i.e., Gas Heating Saturation related to customers is the total number of customers with space heating divided by the total number of customers. Saturation should not be used alone but should be associated with customers, families, households, population or other qualifying terms indicating the universe referred to. For industry statistics, saturation based on customers served is used.

Sendout, Gas: Total gas produced, purchased (including exchange gas receipts), or net withdrawn from underground storage within a specified time interval, measured at the point(s) of production and/or purchase, and/or withdrawal, adjusted for changes in local storage quantity. It comprises gas sales, exchange deliveries, gas used by company and unaccounted for gas. Expressed in various units such as therms, Btu's, cubic feet, etc.

Sendout, Maximum Day: The greatest total gas sendout occurring in a specified 24-hour period. Compare Design Day; Peak Day.

Sendout, Minimum Day: The smallest actual total gas sendout occurring in a specified 24-hour period.

Service (Service Line, Service Pipe): The pipe which carries gas from the main to the customer's meter. Compare Class of Service.

Shrinkage, Natural Gas: The reduction in volume of wet natural gas due to the extraction of some of its constituents, such as hydrocarbon products, hydrogen sulfide, carbon dioxide, nitrogen, helium, and water vapor.

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Storage, Buried Pipe (Bottle-Type Holder): A system of storage in especially designed high pressure pipe sections or bottles capable of storing natural gas at pressures near or equal to the pressure of maximum super-compressibility. Not storage in ordinary steel pipe.

Storage, Local: The storage facilities, other than underground storage, that are an integral part of a distribution system, i.e., on the distribution side of the city gate, whether for manufactured, mixed, natural, liquefied petroleum, or liquefied natural gases.

Storage Mains: Those mains used primarily for injection and withdrawal of gas to and from underground storage.

Storage, Underground: The utilization of subsurface facilities for storing gas which has been transferred from its original location for the primary purposes of load balancing. The facilities are usually natural geological reservoirs such as depleted oil or gas fields or waterbearing sands sealed on the top by an impermeable cap rock. The facilities also may be manmade or natural caverns.

Aquifer Storage: The storage of gas underground in porous and permeable rock stratum, the pore space of which was originally filled with water and in which the stored gas is confined by suitable structure, permeability barriers and hydrostatic water pressure.

Base Gas (Also called cushion gas): The total volume of gas which will maintain the required rate of delivery during an output cycle.

Current Gas: The total volume of gas in a storage reservoir which is in excess of the base gas. Also called Working Gas.

Extraneous Gas: See Stored Gas, this section.

Foreign Gas: See Stored Gas, this section.

Native Gas: The total volume of gas indigenous to the storage reservoir.

Storage Reservoir: That part of the storage zone having a defined limit of porosity and/or permeability which can effectively accept, retain, and deliver gas.

Storage Well: A cased bore hole, extending from the surface into the storage zone, which is used primarily for gas input and/or output purposes.

Stored Gas: Gas physically injected into a storage reservoir.

Ultimate Reservoir Capacity: The total estimated volume of gas that could be contained in storage reservoir when it is developed to the maximum design pressure.

Working Gas: Gas in an underground storage field that is available for market. May also be called Current Gas.

Stored Gas: See Storage, Underground.

Straight Gas Utility: Company which derives the major portion of its total operating revenue from gas operations. For purposes of A.G.A. statistics, a straight gas utility derives at least 95 percent of its total operating revenues from gas operations.

Sub-bituminous Coal: Ranking of soft coal generally having a heating value of 8,300-13,000 Btu's/lb-high volatile matter and ash.

Substitute Natural Gas: See Gas, Natural.

System Type:

Distribution: Generally mains, services, and equipment which carry or control the supply of gas from the point of local supply to and including the sales meters. The system operates at various pressures as indicated below.

High Pressure: A system which operates at a pressure higher than the standard service pressure delivered to the customer; thus, a pressure regulator is required on each service

TABLE 156
EMPLOYEE DISABLING INJURY RATES, BY TYPE OF GAS UTILITY, 1955-1980

Z16.1 DATA

	All Reporting Gas Utilities				Natural Gas Distribution and Integrated Companies		Natural Gas Transmission Companies		Natural Gas Combination Companies[a]	
	Reporting Companies		Rate[b]		Rate		Rate		Rate	
Year	Number	Average Employees	Frequency[c]	Severity[d]	Frequency[c]	Severity[d]	Frequency[c]	Severity[d]	Frequency	Severity
1955	392	180,822	10.17	694	9.91	466	9.97	1,549	e	e
1956	407	189,287	8.68	652	8.37	506	8.62	858	e	e
1957	433	192,355	8.08	462	7.96	442	7.79	546	e	e
1958	516	193,748	8.07	683	7.99	592	8.38	984	e	e
1959	508	192,942	7.31	526	7.78	432	6.37	983	e	e
1960	554	195,591	7.01	563	7.45	616	5.83	332	e	e
1961	581	192,287	6.57	481	6.73	396	5.85	868	e	e
1962	579	194,615	6.41	490	6.69	467	5.81	630	e	e
1963	581	196,376	6.27	546	6.47	439	5.37	1.020	e	e
1964	600	197,023	5.87	465	5.96	416	5.17	644	e	e
1965	625	198,815	5.69	402	5.93	314	4.34	753	e	e
1966	674	200,600	5.85	623	6.10	451	4.55	1,382	e	e
1967	642	202,427	5.69	454	6.07	376	4.32	814	e	e
1968	652	199,442	6.06	533	6.48	478	4.25	799	e	e
1969	703	204,771	6.16	525	6.54	500	4.37	589	e	e
1970	719	200,493	6.34	548	6.66	522	5.02	686	e	e
1971	833	210,589	7.15	473	7.48	444	5.70	634	e	e
1972	736	205,371	8.38	535	8.98	495	5.88	762	e	e
1973	708	207,423	8.18	547	8.77[f]	373[f]	5.67	1,287	e	e
1974	644	208,283	9.08	357	9.75[g]	362[g]	6.12	333	e	e
1975	515	193,957	9.27	570	9.99[g]	518[g]	6.37	785	e	e
1976	407	153,538	11.17	365	12.87[g]	403[g]	5.31	236	e	e

OSHA DATA

	All Reporting Gas Utilities				Natural Gas Distribution and Integrated Companies		Natural Gas Transmission Companies		Natural Gas Combination Companies	
	Reporting Companies		Rate		Rate		Rate		Rate	
Year	Number	Average Employees	Incident[h]	Severity[i]	Incident[h]	Severity[i]	Incident[h]	Severity[i]	Incident[h]	Severity[i]
1976	411	223,240	2.38	20.00	3.27	18.78	1.08	39.24	1.96	19.63
1977	433	243,773	2.46	18.01	3.31	15.86	1.09	20.63	2.00	20.54
1978	423	236,661	2.46	17.11	3.41	14.86	1.10	22.51	2.10	18.90
1979	443	256,797	2.52	16.76	3.57	15.01	1.16	24.71	1.97	17.81
1980	453	262,173	2.62	18.20	3.45	14.28	1.15	32.17	2.26	21.34

a. Included in "Natural Gas Distribution" and "Integrated Companies" under Z16.1 data.
b. Includes "Manufactured and Mixed Gas" and "Liquefied Petroleum Gas."
c. Frequency Rate is number of disabling injuries per million man-hours worked for each injury resulting in a minimum of one day's loss of time.
d. Severity Rate is number of days lost due to disabling injuries, per million man-hours worked.
e. Not available under Z16.1 data.
f. Includes "Manufactured and Mixed Gas."
g. Includes "Manufactured and Mixed Gas" and "Liquefied Petroleum Gas."
h. Incident Rate is total injuries per 100 full-time employees.
i. Severity Rate is average lost workdays per injury.
NOTE: Companies are now required to report under the Occupational Safety and Health Act (OSHA) instead of ANST Standard Z16.1.

to control pressure delivered to the customer. Sometimes this is referred to as medium pressure.

Low Pressure or Utilization Pressure: A system in which the gas pressure in the mains and service lines is substantially the same as that delivered to the customers' appliances; ordinarily a pressure regulator is not required on individual service lines.

Field and Gathering: A network of pipelines (mains) transporting natural gas from individual wells to compressor station, processing point, or main trunk pipeline.

Transmission: Pipelines (Mains) installed for the purpose of transmitting gas from a source or sources of supply to one or more distribution centers, or to one or more large volume customers, or a pipeline installed to interconnect sources of supply. In typical cases transmission lines differ from gas mains in that they operate at higher pressures, are longer, and the distance between connections is greater.

Therm: A unit of heating value equivalent to 100,000 British thermal units (Btu).

Transmission Company, Gas: Company which obtains at least 95 per cent of its gas operating revenues from the operation of a gas transmission system and/or from main line sales to industrial customers. For purposes of A.G.A. statistics, a transmission company obtains at least 95 percent of its gas operating revenues from sales for resale and/or transportation of gas for others and/or main line sales to industrial customers *and* classifies at least 95 percent of mains (other than service pipe) as field and gathering, storage and/or transmission. Compare Distribution Company, Gas; Integrated Company, Gas. See Appendix C for a list of Transmission companies.

Transmission Pipeline: See System Type.

Transmission System: See System Type.

Ultimate Customer: The customer who purchases gas for consumption and not for resale purposes.

Ultimate Reservoir Capacity: Total volume of gas within a reservoir which exerts a pressure from 0 pounds per square inch gauge pressure to the maximum or ultimate reservoir gauge pressure. See Storage, Underground.

Unaccounted for Gas: The difference between the total gas available from all sources and the total gas accounted for as sales, net interchange and company use. This difference includes leakage or other actual losses, discrepancies due to meter inaccuracies, variations of temperature and/or pressure, other variants, particularly due to measurements being made at different times, and in cycle billings, an amount of gas supply used but not billed as of the end of a period. Compare Sendout, Gas.

Underground Storage: See Storage, Underground.

Water Gas (Blue Gas): Made by passing steam over hot coke, or other carbonaceous material; it consists of carbon monoxide and hydrogen with varying amounts of carbon dioxide and nitrogen. It burns with a blue flame.

Well, Wildcat: An exploratory well being drilled in unproven territory, that is, in a horizon from which there is no production in the general area.

Wet Natural Gas: See Gas, Natural.

Working Gas: See Storage, Underground.

APPENDIX B
CONVERSION TABLE

The following are some frequently used units of measure and natural gas equivalents in British thermal units (Btu). Read "=" as "contains" between volumes and energy units.

The national average Btu content per cubic foot is used. For state averages, see page 84.

1 Cubic Foot (cf) = 0.02832 Cubic Meters = 1,023 Btu

1 Therm = 100,000 Btu ≅ 25,200 Kilocalories ≅ 100 Cubic Feet

1 Mcf = 1,000 Cubic Feet = 28.32 Cubic Meters = 1,023,000 Btu

1 M Therm = 100,000,000 Btu ≅ 25,200,000 Kilocalories

1 MMcf = 1,000,000 Cubic Feet = 1,023,000,000 Btu

Conversion examples:
(1) To convert 2,325 MMcf to Btu:
(2,325 MMcf) (1,023,000,000 Btu/MMcf)
= 2,378,475,000,000 Btu
≅ 2.378 trillion Btu
(2) To convert 5,000 trillion Btu to cubic feet:
(5,000 trillion Btu) (1 cf/1,023 Btu)
≅ 4.888 trillion cf (Tcf)
= 4,887,586 MMcf
(3) To convert 22,150 million therms to Btu:
(22,150 million therms) (100,000 Btu/therm)
= 2,215,000,000 million Btu
= 2,215 trillion Btu

For comparative purposes, Btu contents of various energy sources other than natural gas are shown below.*

Fuel oil (barrel)	
Distillate	5,825,000 Btu
Residual	6,287,000 Btu
Coal (short ton)	
Bituminous and lignite	22,200,000 Btu
Anthracite	22,700,000 Btu
Electricity (kilowatt-hour)	3,412 Btu
Natural gas liquids (barrel)	3,955,000 Btu

*Energy Information Administration, Department of Energy, *Monthly Energy Review*, June 1981.

APPENDIX C
COMPANY LISTINGS

Shown below are 100 selected companies, 25 for each company type, as used in the financial and other sections of this publication. These lists are not meant to be comprehensive. Inclusion on this list does not imply individual company data may be released.

Distribution

Alabama Gas Corporation
Atlanta Gas Light Company
Bay State Gas Company
Boston Gas Company
Brooklyn Union Gas Co., The
Columbia Gas of Kentucky, Inc.
Columbia Gas of Ohio, Inc.
Columbia Gas of Pennsylvania, Inc.
Columbia Gas of West Virginia, Inc.
East Ohio Gas Company, The
ENTEX, Inc.
Gas Service Company, The
Great Falls Gas Company
Minnesota Gas Company
Mississippi Valley Gas Company
North Shore Gas Company
Northern Illinois Gas Company
Northwest Natural Gas Company
Peoples Gas Light & Coke Co., The
Providence Gas Company
Richmond Gas Corp.
Southern Connecticut Gas Company, The
Washington Gas Light Company
Washington Natural Gas Company
Wisconsin Natural Gas Company

Transmission

Alabama Tennessee Natural Gas Co.
Algonquin Gas Transmission Company
Cities Service Gas Company
Colorado Interstate Gas Company
Columbia Gas Transmission Corporation
East Tennessee Natural Gas Company
El Paso Natural Gas Company
Houston Natural Gas Corporation
Michigan Gas Storage Company
Michigan Wisconsin Pipe Line Company
Midwestern Gas Transmission Company
Natural Gas Pipeline Co. of America
Northwest Pipeline Corporation
Pacific Gas Transmission Company
Pacific Lighting Service Company
Panhandle Eastern Pipe Line Company
Southern Natural Gas Company
Texas Eastern Transmission Corporation
Texas Gas Transmission Corporation
Transco Companies, Inc.
Transok Pipe Line Company
Transwestern Pipeline Company
Trunkline Gas Company
United Gas Pipeline Company
Western Slope Gas Company

Integrated

Arkansas Oklahoma Gas Corporation
Cascade Natural Gas Corporation
Central Indiana Gas Company
Consolidated Gas Supply Corporation
Equitable Gas Company
Indiana Gas Company
Intermountain Gas Company
InterNorth Incorporated
Kokomo Gas & Fuel Company
Lone Star Gas Company
Michigan Consolidated Gas Company
Michigan Gas Utilities Company
Mountain Fuel Supply Company
National Fuel Gas Company
North Carolina Natural Gas Company
North Penn Gas Company
Oklahoma Natural Gas Company
Peoples Natural Gas Co., The
Piedmont Gas Company
Pioneer Natural Gas Company
Southern California Gas Company
Southern Union Gas Company
Southwest Gas Corporation
Western Kentucky Gas Company
Wisconsin Gas Company

Combination

Arizona Public Service Company
Baltimore Gas and Electric Company
Central Illinois Light Company
Cincinnati Gas and Electric Company
Consolidated Edison Co. of NY Inc.
Consumers Power Company
Dayton Power & Light Company
Florida Public Utilities Company
Illinois Power Company
Iowa Electric Light & Power Company
Iowa-Illinois Gas & Electric Company
Kansas Power & Light Company
Lake Superior District Power Company
Louisville Gas & Electric Company
Montana-Dakota Utilities Company
Montana Power Company
Niagara-Mohawk Power Corporation
Northern Indiana Public Service Company
Pacific Gas & Electric Company
Philadelphia Electric Company
Public Service Co. of Colorado
Public Service Electric & Gas Company
San Diego Gas & Electric Company
Virginia Electric & Power Company
Wisconsin Public Service Corporation

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To: Users of *Gas Facts*

To facilitate answering any questions that might arise concerning data in *Gas Facts,* a list of data specialists for the different areas reported is provided below:

Section II: Energy Reserves—Aileen Bohn, 841-8496

Section III: Natural Gas Production—Aileen Bohn

Section IV: Underground Storage—Judi Schafer, 841-8507

Section V: Transmission and Distribution—Carlos Hinayon, 841-8502

Section VI: Energy Consumption—Carlos Hinayon

Section VII: Customers—Judi Schafer

Section VIII: Sales-Quantities—Shirley Fontaine, 841-8503

Section IX: Revenues—Shirley Fontaine

Section X: Prices—Shirley Fontaine

Section XI: Appliance and Housing Data—Judi Schafer

Section XII: Finance—Pat Curley, 841-8497

Section XIII: Personnel Data—Carlos Hinayon

If you would like the 1980 updated information on production sent to you when it becomes available, please fill out the information requested below and mail to:

American Gas Association
Department of Statistics
1515 Wilson Boulevard
Arlington, VA 22209

NAME ____

TITLE ____

COMPANY______________________________________

ADDRESS ______________________________________